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INFLUENCE AND REFERENCE: A BIOLOGICAL APPROACH TO PHILOSOPHICAL PROBLEMS[1]

ALTHOUGH we are often told—quite recently for example by Mr. Joad in a little book of popular appeal[2]—that the problem of the relationship between mind and matter may be regarded as insoluble, tentative solutions will probably be offered for a good many years to come. Mr. Joad includes in this problem, "the way in which they interact," which raises the prior question whether they do interact; and he qualifies his opinion that the problem is insoluble by inserting the words "for all practical purposes."

The odd thing is that, in one sense of these words, the problem may be regarded as solved every day and hour of our waking life. As a practical problem, in this sense of the expression, *Solvitur ambulando.* What we call mind and what we call matter are somehow interrelated in such wise that very complex sets of events run their course in ways which we can describe with passable accuracy. But this is not the sense in which Mr. Joad uses the qualifying expression. He says: "As the discovery of the whole truth about everything is highly improbable, and is, in any case, an extremely remote contingency, the problem of the relationship between mind and matter may, for all practical

[1] We are especially glad to print this article from Prof. C. Lloyd Morgan. After a long and distinguished career as scholar and administrator, his work still retains the freshness and vigor of youth; and his conception of emergent evolution is at the focus of contemporary discussion of the philosophy of biology. Prof. Lloyd Morgan was one of the earliest contributors to *The Monist*, articles frm his pen having appeared in Volume I.—Ed.

[2] C. E. M. Joad, *Matter and Mind*, p. 7.

purposes, be regarded as insoluble." On these terms is any problem soluble so long as the solution of all problems remains a remote contingency?

One is tempted to wonder whether the problem of the relationship between time and space, no less than that between mind and matter, may not, on like grounds, be regarded as insoluble. Here, too, much depends on what we mean by time and space. Here, too, they are somehow related in such wise that complex sets of events, which imply both, run their course in ways which may be described with much accuracy. But are they, in some sense, causally related? If so is the causal influence one-sided—say on the part of time which "acts into space"—or is it reciprocal? If the relation be not causal, how does anything get itself done? Some may say—and I am one of them—that, given spatial and temporal relations *only,* nothing could ever get itself done. In terms of spatio-temporal relationship, and no other, the problem presented by change—or technically some mode of "acceleration"—in the course of events, is an insoluble problem. But that such changing change in the course of events does happen is undeniable. It sets a problem which, whether it has yet been solved or not, seems to impose on philosophy a demand for fresh endeavor to solve it.

There must therefore—if time and space, though perhaps necessary are not sufficient—be some other relationship, say that of mind and matter which may, or may not, be causally related. In any case we have to seek the natural home of causal relatedness somewhere—if not in space or time then in matter, or in mind, or in the relation of one to the other. Thus we get back, with some added complexity, to the world-problem perhaps basally expressible for empirical treatment in terms of space-time and mind-matter. On these terms it may or may not be soluble. In attempting here to rediscuss, very briefly, fun-

damental questions of perennial complexity and perplexity, I beg leave to approach in my own way a tentative suggestion of the lines along which a solution may perhaps be reached.

One who seeks to write intelligibly on philosophical problems in which the intelligent layman is interested, is faced again and again by an old dilemma. He says to himself, with Lord Balfour, "I require a word to express a concept which is vital to the doctrines I am preaching. Where am I to get it? If there is no such word in ordinary use I must either invent a new word, or I must modify the familiar meaning of an old word. There are objections to both courses; yet one of them must be taken."

If one elect so far to follow the latter course as to modify the meanings of some of the words that are current among those who discuss the problems with which we are concerned, the trouble is that many of them have already been modified in such manner as to render them suitable to express concepts that are vital to the doctrines which others preach—doctrines to which one is perhaps unable to subscribe. What is one to do? No course seems preferable to that of stating in what sense one uses this or that word and, without presuming to dictate to others such usage, to beg that it be taken in this sense and in no other sense. And if one draw in for technical use some word of common speech which therein has diverse meanings in differing contexts, one must render clear what is to be its special meaning in this specialized context.

Clearly the salient words are "mind" and "matter." I do not, however, attempt at the outset to emphasize any special usage of either of them. This only needs saying. I take a material body to be a cluster of natural events which go together under spatial, temporal, and physical relations, within or intrinsic to that body. Where the body is an integral entity, such as an atom, a molecule, a crystal,

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an organism, I speak of the events as its *stuff* whereof the several items go together in *substantial unity*. Any two such bodies have likewise extrinsic relations in virtue of which they are connected in some wise—often in such wise as to form items of stuff in an integral entity of higher order. Such are atoms in the molecule.

Similarly, I take a mind to be a cluster of natural events which go together in substantial unity to constitute an integral entity, in us of a very high order, subject to certain modes of relatedness which are distinctively mental in that broad sense in which "mental" may be contrasted with "physical." We must allow also for extrinsic relations of the mental order, in this sense of the word "mental"—relations not only *within* this or that, but also *between* this and that. It may be that the same cluster of natural events has intrinsic relatedness both physical and mental; and that the extrinsic relatedness between this cluster and that is both mental and physical. This must, for the present, suffice to indicate what I mean when I speak of matter and mind.

To the words "reference" and "influence," I shall attach specially modified meanings. Reference, as I use the word, is distinctively mental. Influence is no less distinctively physical. Influences from Mars may reach the retina of my eye and initiate complex chains of biochemical events with their intrinsic modes of influence in my body. Reference on my part, when I see Mars as an object of vision, is an extrinsic relation of the mental order. Mars, *qua* object of vision, is, for me, mental—not, for me, non-mental, whether this mean physical or "neutral." There would be no reference to an object on my part if I were not in some sense a mind in some way connected with a material body. This usage of the words "influence" and "reference" enables me to give expression to concepts that are "vital to the doctrines I am preaching." Of course, objections may

be raised *in limine*. It may be said that the restriction of the word "influence" to what I call physical influence not only robs the word—in the case of Mars for example—of its old astrological meaning harking back to the days of mythological interpretation, but precludes one from speaking of the influence of Newton's or Darwin's thought on the thought of today; nay more, precludes one from speaking of the extrinsic influence of a mind on another mind. That is so. All I ask is that those who care to read what follows should be at the pains to understand what I mean whenever I use the word. It will always stand for physical influence in a sense which I hope may be comprehensible. Similarly with "reference." What I mean by the word is typically illustrated by reference on the part of some mind to some thing which is *objective* under such reference, and which as such, is mental. This use of the word "objective" is vital to the doctrines I am preaching. All that I can say, then, at present is: *Nota bene*.

Thus, in the usage I seek to make clear, that which is typically objective is one term in the relatedness which I speak of as reference; and the referential relation is to be for us here and now distinctively mental in contradistinction from physical. This seems to render the expression "physical object," or "material object," a contradiction in terms, where the qualifying adjective is incompatible with the noun it qualifies. We must remember, however, that very many of the current expressions of common speech are elliptical. Two foci are comprised within one figure of speech. When I speak of a physical object what I mean is an object of mental reference with which may be correlated a thing, if by thing we mean a self-contained group of physical events. Here again is a concept vital to the doctrines that I preach. The correlation of that which is mentally objective under reference with that which is the source of physical influence on the body, as a thing or sys-

tem of physical events, lies near to the very heart of our problem.

Now if, under what we speak of as sensory perception, a physical system of events (which for the present we accept under acknowledgement) is correlated with an objective world to which there is reference, spatio-temporal relatedness seems to be common to both. Without committing Mr. Broad to doctrines which he would deem heretical, we have to distinguish, with him, what he speaks of as "geometrical" shape or size from "sensible" form. We have, too, to consider in what manner geometrical distance is correlated with the sensible distance of a perceived object of reference. Is, then, geometrical shape, size, and distance to be regarded as physical? It has for so long been customary to regard extension as typically physical that the answer most people will give is: "Of course it is. Shape and size are quite distinctively physical properties. They are contributory to the physical character of a thing as *res extensa*."

Let us, however, distinguish. Perhaps all may agree that whenever there is a system of physical influence there is a spatic-temporal "frame" which, *qua* spatial, is dealt with in terms of extension. But, in an universe of discourse which purports to be philosophical, it is permissible so to use the word "physical" as always to imply some mode of physical *influence*. I beg leave so to use it. I beg leave also to restrict the words "cause" and "effect" in such wise as to be applicable only within a system of physical influence where some change in the current change in the course of events betokens such influence. On this understanding all physical relatedness is causal; and any effect is interpretable in terms of physical influence. And on this understanding I should not say of any two sets of events which are correlated that the one set is either the cause or the effect of the other set.

This implies that the word "correlation" is here used in a somewhat restricted sense. There is for each one of us severally an objective world to which there is cognitive reference on his part. This is the objective world of naive perception. There is also for each one of us severally a physical system of some sort—let us say that which we accept in such form as has been developed in the interpretative schema of scientific thought. If we call this the physical universe, there is need for correlating the objective worlds of naive perception—your world and mine respectively—with the physical universe as known to science.

The trouble is that the word "perception" may not be used—is seldom used—by writers on logic in the restricted sense I intend by qualifying it by "naive." It is taken to include some measure of *interpretation* and is therefore in that measure reflective. Furthermore, it may be said that one cannot speak of an objective *world* that is private to the individual and nowise public. The stress here is on distinctively human perception—which stands at a higher level than naive perception. I cannot here discuss the valid distinction, at this higher level, between public and private which is the outcome of reflective analysis. It must suffice to lay emphasis on the need for correlation of what I call the objective world of naive perception—that of a child of twenty months and that which still is ours in our unsophisticated moments—with the physical universe which is the outcome of reflective thought and bulks large in the sophisticated atmosphere of logic.

Take now the word "interaction." It may be said that by common consent it has already undergone such modification in current philosophical discourse that it means the action of matter on mind, that of mind on matter, one, or other, or both. One must take it or leave it in this specially restricted sense. One may accept or reject the cardinal feature of the concept so named; but one must not apply

the name to some other concept. Clearly on these terms, taken literally, one must not speak of the interaction of physical bodies or systems on each other; nor of the interaction of mind on mind. Some other word, or words, should be used. It seems, too, that this use of the word "interaction" renders it questionable whether we should even speak of the "action" of one physical body on another.

It is, however, pretty obvious that a physicist who enters the philosophical arena is not likely to acquiesce if any such restriction be imposed on the word "action." Nay more he may, on his part, impose a quite different restriction. He may say: All action, in our sense of the word, is within a system of physical influence. And if we use the word "interaction" it means reciprocal action which implies mutual influence of one physical body or system on another. He may, perhaps, add that, in his province of inquiry, he finds no shred of evidence on which the notion of interaction of mind on matter or of matter on mind may be based.

If such an opinion should be expressed, there seems an obvious and ready reply. It may be said: "Apart from your conscious apprehension of physical events, thousands and tens of thousands of the instances of action, in your sense, with which physicists deal in their laboratories, are subject to guidance on the part of highly trained minds. If there be no interaction in our sense there can be neither apprehension nor guidance."

Consider, then, the concept to which the word "guidance" gives expression. Few are likely to deny the validity of the concept, or the appropriateness of the word in some sense, if its meaning be rendered quite clear. Few would raise any serious objection to its restriction in such wise as to imply a factor which is distinctively mental. On these terms we should not say that a planet is "guided" in its orbital course; nor should we say that molecules or

atoms are "guided" to their stations in crystalline structure. We should use some other word. But we may say that the homing flight of the pigeon not improbably exemplifies guidance; and we may assuredly say that the experimental procedure of the physicist is subject throughout to conscious guidance.

Now whenever we have occasion to infer such conscious guidance as few would care to deny, it seems always to imply prospective reference to a state of affairs which may, if all go well, be attained. And since action is contributory to its attainment, we speak in elliptical fashion of the guidance of action. But action for us is distinctively physical, whereas such prospective reference as seems essential to guidance is distinctively mental. No less distinctively mental, for us, is the objective field wherein guidance obtains. Can one adduce an instance of conscious guidance in which prospective reference within an objective field is absent? No doubt the objective field may be correlated with a system of physical events—the existence of which we acknowledge. Whether, and if so in what sense, we should then speak of the objective field as "representative" of the correlated physical system opens up a further question. The nearer question is this: If action obtains within a system of physical influence; and if guidance obtains within a field of reference; how are we to interpret the current and familiar expression "guidance of action"? If guidance be distinctively mental; and if action be distinctively physical; does this expression necessarily imply interaction of mind and matter? I submit that it need not do so if this expression, like so many others in common parlance, be elliptical. There may be two stories of the natural events, all of which are both physical and mental—not some of them physical and others mental. This has been the belief of philosophers of admitted distinction. The one story may be told in terms of action under influence; the other story may be

told in terms of guidance under reference. One gives a physical interpretation of the course of events; the other gives a mental interpretation in terms of reference. One deals with material things; the other deals with their objective correlates. Both interpretations may be such as to withstand the brunt of criticism. Hence the elliptical expression "guidance of action" (which is a bit of the one and a bit of the other) may well be good enough for common parlance, and yet not good enough for analytic thought where the twin foci are distinguished.

When. therefore, we speak elliptically of guidance of action under conscious reference to an end in view, the change of direction in the course of events—which is what can be observed—may always be subject to the physicist's rubric that all action is determined within a system of influence. If this be so, it does not necessarily entail acceptance of interaction of mind on matter. To say that all guidance presupposes conscious reference (which the physicist is not concerned to deny) does not justify the assertion that if there be no "interaction" there can be no such guidance. It may, however, still be roundly asserted that, apart from "interaction," there can be no guidance *properly so called.*

But who is to decide what is "guidance properly so called"? If I say that all typical guidance is subject to objective reference to *consequences* which are more or less clearly foreseen, shall I be told that this is not guidance properly so called? Anyhow that is what I do say. And I must try to render clear what I mean. Now I may mean by the word "consequences" just what I mean by the word "effects"—neither more nor less. But here and now I do not. By effect I mean the outcome of action under influence. All effects are physical effects. By consequence I mean that to which there is objective reference subject to correlation with the outcome of action as the effect of in-

fluence in the physical system. In elliptical phraseology the consequence is always *more than* the effect in that it is the effect foreseen and thus also a consequence. As I put it, the consequence has a higher emergent quality which the effect lacks. According to the adage, the burnt child shows guidance of action in behaviour from which we infer some prospective reference to consequences. But it seems that, in the burnt moth, there is little evidence of such guidance. Here it seems that consequences are not foreseen, at the level of naive perception, though the effects of the candle flame may be disastrous. If this be so, in the given situation, consequences are not emergent in the mind of the moth.

Is this distinction between consequences and effects too fine-drawn to meet with ready acceptance? Surely, save in the manner of statement and perhaps in range of application, there is in it nothing new. It is in line with what Lord Balfour and others have to say on the interplay of "causes and reasons." It emphasizes the "means-consequence" relation on which Professor Dewey has much that is pertinent to say. It connects the twin concepts of means and meaning and, under correlation, it links up with physical causation. For (elliptically) "means are always at least causal conditions, but causal conditions are means only when they possess an added qualification; that namely, of being freely used, because of perceived connection with chosen consequences. . . . Similarly consequences (ends) are at least effects; but effects are not ends unless thought has perceived and freely chosen the conditions. . . . We live on the human plane, responding to things in their meanings. A relationship of cause-effect has been transformed into one of means-consequence."[3]

Notwithstanding some difference in modes of expression I think Mr. Dewey and I are at one in drawing a distinc-

[3] John Dewey, *Experience and Nature*, pp. 366-7; 371.

tion between effects in the story of physical causation and consequences which, for me at least, belong to the story of reference. Whether we speak of "transformation" (in some sense) or not, effects and consequences are so correlated as to justify the elliptical expression "guidance of action." But the correlation of physical events in a system of influence, with objective situations, perceptual or reflective, in a field of reference, need not imply interaction of matter or mind or of mind on matter. Neither correlate should be spoken of as the cause of the other. And it is this I think that most people understand interaction to mean. But the word "cause" is an umbrella under which rather diverse concepts take shelter. Be it noted then, that, as I here and now use the word, I always mean causation within a system of influence. On this understanding "causal interaction" between mind and matter is barred in that usage of words "which is vital to the doctrines I am preaching." Otherwise expressed there is no influence of mind on matter or of matter on mind.

So much with respect to a concept of guidance which does not necessarily imply that of interaction.

There remains, however, the question: In what way are those mental events which determine guidance under objective reference related to those physical (bio-chemical) events in the body which are causally effective in action under influence? We need here a word to which a special connotation shall be attached. I have been led to regard *concomitance* as the most suitable and the least ambiguous.

It is already extensively in use. But it is commonly restricted to psycho-physical events which, as physical, take place in the brain, or at an rate some part of a central nervous system of the synaptic kind. I proceed on the hypothesis that concomitance is coextensive with all physiological events throughout the organism. That allows for concomitance in the Amoeba or Paramoecium which has

no nervous system of the synaptic kind. It allows, too, for such concomitance in us as will embrace not only a restricted brain-mind connection but an unrestricted body-mind connection. I should therefore say: Just as all the physiological events in the body go together in substantial unity under influence to give what we call the life of a man, so do all the concomitant mental events go together in substantial unity under reference to give what we call the mind of man.

This is admittedly an hypothesis. Is there any empirical interpretation of the connection of body and mind that is *not* hypothetical? But there are other hypotheses. One is that many mental events are concomitant with physiological events of a specific kind, but that some mental events have no such concomitants. Another is that some physiological events have mental concomitants but that many physiological events have no such concomitants. The former, as commonly held by its defenders, comes to this: Certain "higher" mental events have no physiological concomitants; the latter to this: Certain "lower" physiological events have no mental concomitants. My hypothesis is that *all* physiological events (whether higher or lower in some sense of these words) have concomitants which are the "stuff" of mind; and that all mental events, whether lower or higher, have physiological concomitants which are the "stuff" of life. This, then, and nothing less than this where organisms are concerned, is what I mean when I use the word "concomitance."

May I now say that the natural entity which we speak of as body-mind is an integral cluster of events with two quite different sets of "properties" that are knowable, in two quite diverse ways, in this "attribute" or that. On my view such difference in attribute is the expression of different kinds of relationship within the same cluster of natural events—that is, within body-mind. But neither the prop-

erties under these two attributes—call them materiality and mentality if you like—nor the kinds of relatedness of which they are the expression, are (under my terminology) causally related. Neither stands to the other in the relation of cause or effect. It suffices to speak of them as concomitant.

The integral cluster of natural events which is body-mind has—or rather affords an instance of—substantial unity. In bodily regard the events go together within a system of influence under give and take of a specifically physiological character intrinsic to the body. In mental regard the events go together within a system of reference so far as this reference is intrinsic to the mind under what I speak of as "enjoyment." The "tie" of their going together can thus be physically interpreted under influence or mentally interpreted under the relatedness which belongs to the order of reference. But, though it has two-fold expression, in this attribute or that, there is but one tie and but one substantial unity.

There is thus, in one regard the physiological or vital unity of life, and in the other regard the intrinsic unity of mind. The one is substantial unity as interpreted under influence; the other is substantial unity as interpreted under reference. But the unity of life does not "cause" that of mind; nor does the unity of mind "cause" that of life. Between life in physical regard and mind in other than physical regard, there is no causal interaction. There is, however, something unique and *sui generis,* for which "concomitance" seems the most appropriate name.

Something further may be added as to what I mean by "intrinsic" and "extrinsic" under usage which is in some measure modified to meet the special requirements of my thesis. Let us start with the body. In the present context the body is, *au fond,* a rounded off, "self-contained," cluster of physical events which go together and run their

course in such manner as the physiologist and the biochemist discuss; and in such manner as leads ordinary folk to say that the body is alive. But, in a wider sense of the word, there are in nature as a comprehensive physical system, "bodies" other than living bodies; and there are plenty of relatively loose events which do not seem to be rounded off so as to constitute bodies. What rounded off physical body is correlated with that familiar object of reference which we call a rainbow?

The word "intrinsic" I use to label a set of events within a rounded-off body when we distinguish the influence under which there is change in their manner of "go" as also within that body. But there is also influence from one body on another; influence transmitted in ways which it is for the physicist to discuss; influence as a relation between bodies. The set of events outside the rounded-off body—the body of a man for example—influence that body "extrinsically." Apart, then, from such qualifications as would be called for in more ample treatment, one may say that intrinsic influence is within some given body duly indicated; extrinsic influence is between that body and other bodies or other physical events.

In the physical system of events—the existence and persistence of which we acknowledge—there is always give and take of extrinsic influence. Furthermore, though we may analytically distinguish the extrinsic from the intrinsic, influence is all of a piece. As Dr. Broad says:[4] "The material realm does seem to form one system in a fairly definite sense. . . . Moreover, the whole seems to be of much the same nature as the parts. The spatial and causal relations within a finite body and between its parts are of much the same nature as the spatial and causal relations *between* two finite bodies and within the material realm as a whole." And then he says: "Now, so far as

[4] C. D. Broad, *The Mind and Its Place in Nature*, p. 32.

one can see, there is very little analogy to this in the mental realm."

Here and now, however, I am not concerned with Dr. Broad's thesis but with my own. I quote him only that I may indicate how far we agree and where we part company. I agree with what he says about the "material realm"; but, for me, proceeding on the hypothesis of concomitance and not that of interaction, there *is* analogy, in the sense of salient features common to both, in the "realms" of influence and of reference, in my sense of this word. The two realms differ in that there is no causal relatedness within a system of reference or between a system of reference and a system of influence. They differ, too, in that the relation of reference is quite different from that of influence. The one is distinctively mental; the other is distinctively physical. None the less, it follows from concomitance that just as within the body there are modes of influence, intrinsic therein, so too within the mind there are modes of reference, intrinsic therein; and that just as modes of influence within the body are of one texture with modes of influence between bodies, so too modes of reference within the mind, as a system of enjoyment, are of one texture with modes of reference to external objects, as I use this word.

At what I call the emergent level which the organism has reached in the course of evolutionary advance its life is within it. Of course, the body is responsive to influence from surrounding bodies, and, in responding, influences some of these bodies. With this readily observable give and take of influence we naturally start. But in due course we seek to learn what goes on within this life-center. Therein, it seems, are those multifarious actions and reactions which are necessary, though perhaps not sufficient, to enable us to interpret the intrinsic life and the extrinsic behavior of the organism. What one may speak of as the

contexture of life—the interwoven fabric of events which are very subtly inter-related under influence—has now been partially, but not yet completely, elucidated through the inquiries of specialists, especially those who supplement analysis in detail by presenting synoptic views of life in its concrete entirety, with substantial unity of all the several events as distinguishable items of stuff.

Even so, however, we are regarding body-mind under the concept of influence only. We are disregarding the factor of mind. We are dealing with the physical in abstraction from the mental. In the concrete instance there is not only body; there is body-mind. An adequate doctrine of body may be "necessary"; but to render an interpretation of observable events "sufficient" this doctrine of body must be supplemented by an adequate doctrine of mind. What form shall it take? It takes one of two quite different forms under the hypothesis of interaction and under that of concomitance.

We have seen that in what I call life a vast number of physical or bodily events, as constituent items of stuff, go together in substantial unity within a system of influence. My hypothesis is that all these items in the stuff of life have their concomitants in the stuff of mind; and that the substantial unity of life in one regard is, in the other regard, the substantial unity of *enjoyment* as intrinsic to the individual mind. What I mean by "enjoyment," and in what manner it implies reference as the distinctively mental mode of relatedness, I can here and now but briefly indicate. I must be content to do little more than paraphrase a sentence of M. Bergson's. His interpretation of life is very different from mine. But, speaking of the organism, he says that "all goes on as if the cell knew of other cells, what concerns itself." The "as if," I take it is here the sign of an hypothesis. My hypothesis is that all goes on within the body-mind, as if there were not only

a physical nexus of intrinsic influence, but also a mental nexus of intrinsic reference. But if life and enjoyment be concomitant, neither nexus is "independent" of the other, and yet neither nexus is the cause or the effect of the other. I know full well that a doctrine of such non-cognitive reference needs further and fuller elaboration. But this must here suffice.

It may be said, however, that it whittles down the concept of reference to something that the plain man can hardly recognize as such. We are bidden to suppose that concomitant with the inner life of an amoeba there is intrinsic enjoyment, of a sort, which somehow betokens relations of reference; and that when its body is influenced by other bodies there is extrinsic reference, in however primitive a form, to something in that which we speak of as the objective environment. That whittles down reference to proportions sufficiently slender. But I plunge a long way further down—even to the very foundations of events. Just as I conceive influence to be ubiquitous throughout nature, so too do I conceive reference as a mode of relatedness to be no less ubiquitous. Such is my hypothesis in its full range—assuredly no new one save in the form in which it is stated. For the property of materiality I substitute the relation of influence and what it entails; for the property of mentality I substitute the relation of reference. Then I say that under no circumstances does the one become the other. In more familiar terms mind does not arise out of matter. On this hypothesis no form of "emergent materialism" is tenable. And if it be said that the hypothesis is speculative, I reply that no less speculative is emergent materialism. Any hypothesis that is radical is bound to be speculative.

No doubt it will be asked: What evidence is there of reference as ubiquitous throughout nature? But clearly there are the prior questions: What is the nature of refer-

ence and what the evidence thereof anywhere in nature—say as distinctive of human experience?

We must turn, then, in further detail to reference in the extraordinarily complex form that is emergent in ourselves at our level of reflective thought. We must ask whether, in us, reference is not also exemplified in a simpler cognitive form under what we speak of as naive perception. And we must raise the question whether, even in us, reference is not in evidence at a yet lower level in the more primitive form that we may call non-cognitive. It is, I think, pretty obvious that all the first-hand data on which a theory of reference may be based must be sought in our own experience; and that our analytic mode of procedure, under the conditions imposed by the subject-matter of the inquiry, should be from above downwards. But this does not preclude a subsequent synthesis in reflective thought which purports to give a synoptic view of the progressive evolution, from below upwards, of an objective world of reference.

Now my hypothesis is that whereas influence comes in to some body-center from outside the body or from some other center within the body, extrinsic reference always goes forth from the center which is thus subjected to physical influence of some kind; and that, save as recipient of extrinsic influence there is not initially the kind of event from which, in mental regard, reference goes forth. In view of extrinsic reference *to* an objective world one must use some such expression as "goes forth," though there is no transmission of reference analogous to that of influence. That there is specialized provision for the transmission of influence within the body must here be taken for granted.

Starting, then, from the reflective level to which the human mind has attained, we must ask: What form does reference here assume? It commonly takes the form of that which, if I rightly understand, Dr. Broad speaks of

as "external reference."[5] Let me, however, put the position, as I see it, in my own way. I am, at any given moment, whatever else I may be, a system of enjoyment in which conceiving, perceiving, sensing, feeling fit or the reverse, and all else that one can speak of in mental terms as "ing" (imagining, remembering, and the rest) go together to constitute the "self of enjoyment" that is I. At the reflective level we are analytically concerned, let us say, with thinking. Correlative with this thinking—in a sense we may say the product of thinking—is the objective field which comprises all that is "thought of." To that objective field there is reference from the self of enjoyment—that is on my part as referring to that field. Reference "goes forth" from what for reflective thought is me to it. But within this objective field to which reference from me goes forth there is first *this* and then *that* which are the centers to which my thinking has reference at this moment and that. But when *that* becomes the dominant center referred to, *this* does not drop out of the objective field of reference. It is retained in the field of reference in a more or less sub-dominant form.

One has to put the matter very briefly and crudely, suppressing such qualifications as would side-track us. The point is that there is a quite legitimate sense in which it may be said that, within the field of objective reference, *this* has ("external") reference to *that*. But there is also a legitimate sense in which I may say that the objective field as a whole stands in ("objective") reference to me as a thinking self of enjoyment. Be it understood, then, that it is in this latter sense that I speak of extrinsic reference. But *this* and *that* are unquestionably related within certain fields of objective reference. May I, without doing violence to customary usage, speak of the relation then obtaining as that, broadly speaking, of meaning? And may I draw

[5] Cf. Broad, *op. cit.* External reference is discussed on p. 151; objective reference on p. 565.

a distinction between "meaning" in naive cognitive perception, and that higher order of meaning which I call "significance" for reflective thought? Then I regard meaning and significance as intervenient relations of the distinctively mental kind. It is through this intervenience that there is on my part transition of objective reference from *this* to *that*.

Now if I be allowed to characterize a field of cognitive perception as one in which there is always a relational network of meaning, it must analytically be distinguished on the one hand from a field of reflective thought in which there is always a relational network of significance, and on the other hand from a non-cognitive field in which there is immediate reference without any superadded network cognitive or reflective. But the distinction, so far as our own adult life is concerned, is frankly analytical, since there is reference at all three levels. There are not three separate objective fields of reference—reflective, cognitive, and non-cognitive—but one field of reference which we reflectively submit to distinguishing analysis. Subject to such analysis we may, however, say that a field of reflective thought with significant relations, involves cognitive perception with relations of meaning; and that this in turn involves non-cognitive reference in "bare sensory acquaintance." Apart from perception I cannot estimate the loss of candlepower in my electric lamp as due to whatever I may deem significant for the interpretation of this loss; and apart from immediate reference at what I call the non-cognitive level (bare sensory acquaintance) there would be no perception of a lamp with some estimated loss of candlepower. Such, in brief outline, is the way in which I seek to express a concept of levels of objective reference that is consonant with the doctrines I preach. It keeps within the story of reference and does not go beyond it. But here someone may say: If you acknowledge (as you

profess to do) a physical system of influence with which our so-called world of objective reference may be "correlated" (as you use this word), do you not—must you not—go beyond your story of reference? How else can you *get at* a trans-objective physical system—existent in its own right—with which your objective world may be correlated?

I must raise the prior question: Can one "get at it" save as that which is objective in a field of belief, acknowledgement, rational demand, presupposition, conviction—or however else it may be named? And has such acknowledgment—to select one word—place in any field of reference save that which is developed at the reflective level? Of course, all of us acknowledge something in gross and in detail. In gross you and I acknowledge what we are pleased to call the universe; in detail you may acknowledge interaction whereas I acknowledge concomitance. Forthwith my universe is very different in relational structure from yours. Which is *the* universe? And who is to decide whether your universe or mine accords with what we may both speak of as Reality and write with a capital letter?

We are in the thick of difficulties. In reflective thought one seeks to attain truth with reference to Reality. But, as Professor Alexander puts it, truth is not Reality itself but reality as possessed by the reflective mind. Save as thus possessed by mind, and receiving the mind's impress, Reality lies beyond the reach of reflective thought. Even if we "acknowledge" Reality as that which can be so possessed, acknowledgement itself falls under the rubric of possession by mind. Substitute for "acknowledgement," say, "belief," "presupposition," or some other word, and the position remains the same. Beyond reality as objective under reference we cannot get. The most we can do is to correlate the reality which we reach under reflective

thought with that with which we are perceptually acquainted under cognitive reference and with that which we infer as objective under non-cognitive reference. To this end we frame some schema which purports to afford an avenue of approach towards a constructive philosophy.

What do I mean, then, when I speak of correlating a world of objective reference with a physical system of influence? I confess that this way of expressing what I mean is elliptical. So I revert again to the concept of levels and restate thus: At the mind-level of perception (as I use the word) there is a world of objective reference, distinctive of that level, which we take naively and unreflectively at its face-value, subject to such network of meaning as meets the requirements of ordinary behavior. At the level of reflective thought there is the physical system which we accept under acknowledgement, subject to such a network of significance as meets the requirements of scientific interpretation. The one gives the objective world as it is seen, heard, tasted, touched and so forth, in so far as perceptual reference goes forth to it. The other gives the no less objective physical system (one must speak elliptically to avoid cumbrous circumlocution) which is objective to thought as well as to sensory acquaintance. There is need for correlating the one with the other in the hope that thereby we may at least contribute to a more adequate concept of reality as, for us, a system of events in spatio-temporal relatedness, exhibiting relations of influence and reference, and subject to concomitance without interaction. Of such a nature as this and nothing less than this, in its positive avowal, is the reality I acknowledge with the emphasis of conviction. I say "nothing less than this"—not "nothing more than this"—so I should add "in the naturalistic regard which is here my universe of discourse."

One may now remind those who have read with the care it deserves Dr. Broad's discussion of *The Mind and Its*

Place in Nature, of what he says on "inherence-from-a-place-in-a-place" as a relation which is simple and unanalysable.[c] Thus in visual perception we have to consider an emitting region, a region of projection, a pervaded region, and a pervading shade of color." What he means by this he has rendered sufficiently clear. By way of contrast let me state the position as I see it in a form accordant with my thesis—not with his. What on this view normally happens is reference, distinctively mental, from a place occupied by body-mind (*qua* body) to a place occupied by physical events which influence the body with which the mind is concomitant. Reference no less than influence is a relation which is ultimately simple and unanalysable. By "normally" one means what is meant by the physicist when he substitutes "in a homogeneous medium." If the medium be non-homogeneous reference is abnormal—that is, to an objective place other than that which is occupied by the physical events that are the source of influence on the body. Hence arises need for correlation of "sensible" place under objective reference and "geometrical" place assigned under a physical schema of interpretation.

There is also reference from a time to a time; and, if reference be instantaneous, while influence "takes time" in transmission, the date under objective reference always needs correlation with the date of physical emission. Furthermore the difference between the date of emission and that of objective reference may entail a difference between the "place" of emission and that of objective reference. But what we refer to a place at a moment is a group of objective qualities. Mr. Broad says that these qualities "inhere in a place from a place." In a little further detail, physical events in the emitting region determine under influence "certain events in our eyes, optic nerves, and brains; and the latter events are the immediate necessary and suf-

[c] *Op. cit.*, pp. 162, 168.

ficient material conditions of the pervasion of the external region by such and such a color from the region of projection which contains our bodies." On our hypothesis these events in our bodies are concomitant with those mental events in our minds in virtue of which we are selves of enjoyment. But we are also selves from which objective reference goes forth. For us then objective qualities—not so-called secondary qualities only but all objective qualities—inhere in their objective place under the distinctively mental relation of reference.

It will be sufficiently clear to those who are acquainted with Mr. Broad's thesis that mine differs *toto coelo* from his. For his contention is that "the pervasion of a certain place by a certain color from a certain region of projection is *not* dependent on this color being perceived by the mind which animates the organism that occupies the region of projection." And he adds, with the emphasis of italics: "*Nothing* depends for its existence on being perceived." For this, in sheer contrariousness, I might substitute: *Everything* that is objective (in my sense) is "dependent" for its *objective* existence on perceptual reference—or on some other mode of reference, non-cognitive or reflective.

Now if, on my own terms, I may so far agree with Mr. Broad as to say that reference, perceptual or other, has no causal influence on the acknowledged course of physical events, he will not agree with me when I say that the course of physical events has no influence on perception as such. Physical events outside my body *do* causally influence those within my body. These events without and within my body, are physical in that they exhibit action and reaction in a system of influence. But they are not *only* physical since they are *also* related in a system of reference. I should not speak of the events in question as neutral, if this means that *neither* mode of relatedness obtains; for my contention is that *both* modes of relatedness obtain.

But on my view the more essential point is that, though both modes of relatedness obtain, neither is cause nor effect of the other—neither influences nor is influenced by the other.

On this showing perception, as such, is not influenced by the course of physical events. There is no one-sided interaction of matter on mind. But as we have seen, there is no other-sided interaction of mind on matter, according to my hypothesis of the nature of guidance.

If the acknowledged reality we call Nature be one and indivisible, we must not deal with reference in vicious abstraction from influence; and we cannot deal with influence apart from the reference implied in our acknowledgement thereof. Since, then, influence and reference are never divorced in concrete "fact," a story of reference takes influence for granted. And, at the cognitive and reflective levels of reference, a story of life in physiological terms of stimulus and response, takes for granted a story of *prospective* reference as distinctive of a mind at this stage of mental development. To affirm that, in the organism, all that happens should be interpreted subject to the concept of causal influence does not justify the assertion that, if this be so, guidance with reference to consequences foreseen—that is, typical guidance—cannot be interpreted on the hypothesis of concomitance without interaction. That there are difficulties may be freely and frankly conceded. But they cannot be faced until the full scope of the doctrines I am concerned to preach have received careful, candid, and critical consideration.

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IDEALISM AND EVOLUTIONARY NATURALISM

THE prominence of the concept of evolution in contemporary philosophy is due, by common consent, to the influence of modern biology. But this observation requires to be very carefully interpreted, if it is not to mislead those who know much of biology, but little of philosophy. It is a good many years now since Professor John Dewey wrote a paper on "The Influence of Darwinism on Philosophy," in which he heralded a new approach to all problems of human thought and conduct by way of treating all human activities as responses to stimuli, as efforts of the human animal to adjust itself to, and master, its environment. Here were the foundations of a "naturalistic" treatment of psychology, ethics, epistemology—in general, of a naturalistic theory of man. And the impulse had come from Darwin's theory of "evolution." But it is curious to notice that, alike in Dewey's original statement of that influence and in its subsequent development into behaviorism in psychology, instrumentalism, naturalism and realism in philosophy, it has been the *naturalistic* rather than the *evolutionary* side of this influence which has been dominant and abiding. Or, to put this more precisely, the conceptual apparatus of Darwin's theory of evolution—accidental variations, struggle for existence, survival of the fittest, etc.—has been dropped, nor have post-Darwinian developments in biology (e. g., theories of Mendel and Weissmann, with all the detailed researches to which they have led, or the rise of neo-Lamarckianism) exercised any marked in-

fluence on our evolutionary naturalists in philosophy. All that survives of evolution in the strictly biological sense in which it concerns the descent and differentiation of species, is a generalized *genetic* point of view, i. e., a method of studying the stages through which a character or function develops. On the other hand, even in the absence of the genetic point of view, it is the application to human life in all its aspects of the biological concepts of response to stimulus and adjustment to environment which makes psychology and ethics "naturalistic."

Moreover, biological concepts of evolution, after all, apply only to the phenomena of life, whereas the universe as a whole is the proper province of philosophy. Hence, the concept of evolution had to be stripped of its specific biological meaning and generalized by wider use. Thus, in actual fact, evolutionary philosophy owes much more to Herbert Spencer than to Charles Darwin. For, it was Spencer who, treating biological evolution as only one chapter in the whole story, expanded the concept of evolution to cosmic proportions and thereby made it the fundamental concept for a certain type of philosophical construction. True, no contemporary evolutionist has repeated Spencer's grandiosely futile attempt to sum up the whole story of cosmic evolution in a single formula. But many evolutionists at least try to set out the historical sequence of stages through which what Lloyd Morgan calls "the increasing richness in stuff and substance"[1] of the universe has been achieved, whether that sequence be Morgan's own pyramid of matter—life—mind, or Samuel Alexander's ampler progression from space-time to deity, and perhaps beyond deity—who knows?

Indeed, it seems to me that, of all the evolutionists whose writings I have read, Alexander is the only one who takes evolution seriously. He is the only one whose universe is

[1] *Emerson's Evolution*, p. 206.

still evolving, and who is prepared from indications in its present condition to forecast what the next stage is going to be, viz., the emergence of the new quality of "deity" in the birth of which the world is now travailing. By contrast, Lloyd Morgan's universe strikes me as *finished*—matter-life-mind: there is the whole story. Not, of course, that Lloyd Morgan says so in so many words. But it is implicit in his whole attitude and, symptomatically, in the neatly pointed apex of his pyramid.[2] One misses in Lloyd Morgan, Alexander's sense of the present being big with cosmic novelties of great moment about to emerge. Again, Roy Sellars's interest in the plan of evolution does not, so far as I can see, extend even so far as that of Lloyd Morgan. What Sellars values in the evolutionary point of view is the aid it lends to a naturalistic theory of mind, by treating mind as a product of evolution in the context of the physical world. Bergson comes nearest to Alexander in regarding evolution as a *creative* process still going on, but he, too, has no interest in working out any ordered plan of evolution; and if he were to do so his view of matter as due to the detension, or slackening, of the *élan vital* would inevitably put his theory into a class apart. His distinction between instinct and intelligence offers divergent lines, rather than successive levels (or stages) of evolution. In general, Bergson concentrates his efforts on intuiting the creative urge at the heart of the universe and on sharing the exhilaration of its showers of unpredictable novelties.

In this connection, it is worth noting that, compared with Lloyd Morgan and Sellars, both Alexander and Bergson, for all their efforts to incorporate the findings of science in their theories, are "metaphysicians" rather than "naturalists." Indeed, if it is the mark of a "metaphysician" to go behind the scientifically ascertainable facts of

[2] *Loc. cit.*, p. 11.

evolution, whether on the biological or the cosmic scale, in the search for a source or cause (agent) of evolution, then even Lloyd Morgan is a metaphysician, and Sellars's type of theory the only genuine "naturalism." For, does not Lloyd Morgan confess: "From the point of view of a constructive philosophy, I, for one, am unable to see how one is to explain all that goes on from start to finish without activity [=God]. The more adequately we grasp the naturalistic and agnostic position, the more urgent is the call for some further explanation which shall supplement its merely descriptive interpretation."[3] And thus Lloyd Morgan is led on to "acknowledge" by an act of faith, which corresponds to the Kantian "postulates of reason," divine activity and purpose as *omnipresent* throughout the whole scheme and process of evolution. Proof of God is impossible: enough that the acknowledgement of him is not inconsistent with the naturalistic picture and is empirically based on the feeling of being drawn upwards by an ideal.[4] Whence it follows that "evolution" itself has two distinct meanings, viz., (a) a naturalistic meaning—"the outspringing of something that has hitherto not been in being" [=emergence]; (b) a metaphysical meaning—"the unfolding of that which is enfolded" (the timeless activity of God for whom plan and execution are one and indivisible).[5]

It is easy to imagine how many an ultra-modern "naturalist," proud of having adopted a purely "scientific" view, will give a pitying shrug of the shoulders at what he will perhaps call Morgan's resurrection of "old-fashioned" theism. But, speculatively considered, this combination of naturalism and theism raises some of the profoundest, if also oldest, problems of philosophy. Emergent evolution is essentially a process in time; yet it is the expression of

[3] *Loc. cit.*, pp. 206-7.
[4] *Loc. cit.*, p. 208.
[5] *Loc. cit.*, pp. 111, 172.

an activity which is timeless. Such a view brings us full face against the problem of the "reality" of time—a problem made only the more urgent for us when we recall that both for Alexander and Bergson time is either the ultimate reality, or at least its essential mode of being. For Alexander, the whole evolutionary process is the outcome of the inherent "go" (so to speak) of time, of its creative restlessness. Bergson's *élan,* similarly, creates its inexhaustible novelties in the medium of real time. The Universe, as the Italian neo-Idealists say, is historical through and through. Yet, for evolutionists, its nature is historical in a peculiar sense. For, the past is not simply lost. Successive novelties emerge, but the results of earlier emergencies persist and condition the later. Matter comes before life in the temporal order of evolution, life comes before mind. But, also, life could not emerge except in material bodies, nor mind except in material and living bodies. Thus, the history is cumulative. The new emergents are added to, incorporated with, the pre-existing stock and the universe from stage to stage of these changes is enriched. Creative evolution clearly belies the old principle, *Ex nihilo nihil fit.* For it there is always more in the "effect" (the later stage) than there was in the "cause" (the earlier stage). Yet, it might have been thought that the dialectical weaknesses of such a construction had been explored more than enough, and its inherent contradictions exhibited once and for all. When the concept of evolution is applied on a cosmic scale to the universe *as a whole,* and time is declared to be real in order that the universe *as a whole* may successively be enriched by emergent novelties, it becomes necessary to rehearse once again the familiar criticisms, if only lest the speculative alternative which they imply be overlooked by a generation which is apt to be better versed in science than in philosophy. Here is the logic of the matter: "The whole cannot change. The whole I take to mean the universe,

all that in any sense is. It cannot change, because any change introduces something that is, and this, *ex hypothesi,* falls within the whole. The whole, if it changes, was not the whole, but something less. All that is includes all that can be; there can be nothing more than it."[6] Apply this to a cosmos in evolution. At any given stage we have "all that is." Presently, something new emerges and *is* now, in addition to what was there before, and still continues to be. Moreover, the new emerges out of what was there before, and requires, for its own existence, the continuance of what was there before. Is this really intelligible? And why does the emergent emerge just when it does and neither sooner nor later? I have no wish to be guilty of caricature, but the recipe for the sort of "creative evolution" by which the universe is supposed to evolve as a whole seems to be this: Assume that, at the start, something is going on, and anything may happen thereafter. Does this criticism, then, deny the fact of evolution? On the contrary, dialectical arguments never deny any genuine fact. They only show it to be "appearance," not "reality." Or, to put this point less technically: the subject of which we can truly predicate that it evolves in time is something less than the whole universe. Logically, it is a question of the "context" within which such a judgment is true; and "context" means that the subject is not the universe as a whole. Such a series as Matter-Life-Mind, or whatever else we take the order of evolutionary stages to be, may easily deceive us on this point. If it is expanded into the judgment that there was a time when the universe *as a whole* was nothing but matter, that next it (the universe) became living matter, and finally mind-endowed matter, the result is a metaphysical blunder. If "life" and "mind" have evolved from "matter," the only possible inference is that the universe was, and is, more than "matter." Thus,

[6] B. Bosanquet, *The Meeting of Extremes in Contemporary Philosophy,* p. 177.

time and evolution fall within it, and its nature as a whole is still to seek, and all that we experience in time, and infer to have existed, or to have come to be, in time, helps to reveal (i. e., contributes to our knowledge of) its nature as a whole. "The histories which are within the universe bring an eternal world into our experience."[7]

Thus, the transference of the concept of evolution from its original biological context to the universe as a whole raises inevitably a complex of familiar speculative problems—the possibility of conceiving the existence of the whole universe as a temporal process; the unity of the universe in its self-enrichment by successively emerging novelties; the nature of the universe as a whole in the light of all its manifestations. It is where it raises these problems, openly or by implication, that evolutionism challenges comparison most pointedly with other types of speculative philosophy. In my judgment, the comparison is not in favor of evolutionism, for—speaking generally—the representatives of cosmic evolution ignore the dialectical difficulties inherent in their position, and, so far as they are "naturalists," they strive to fit their metaphysics into the framework of science, instead of treating the scientific view of the world in the wider context of what the whole range of human experience and thought reveals of the nature of the universe.

II

Next to evolution itself, the topic of most philosophical interest and importance in evolutionary naturalism is knowledge.

[7] Bosanquet, *loc. cit.*, p. 190. For brevity's sake, I have touched above only on the abstractly logical side of the argument. Its other sides, involving especially the interpretation of moral and religious experience, are worth following up in Bosanquet's *Meeting of Extremes*. Cf. also my article on "Neo-Realism and Religion" in *Harvard Theological Review*, April, 1918.

UMI

On its "naturalistic" side, the most prominent motive in evolutionary naturalism is to fit mind and knowledge as "natural phenomena" into the context of nature. To treat mind (and knowledge as one of the functions of mind) as a phenomenon among other phenomena, conditioned by others, conditioning others in its turn, is the program. On this side, therefore, evolutionary naturalism is "realist" in character and aligns itself with other forms of modern realism against all forms of idealism which assign to mind in one way or another the central position in the universe. The concept of evolution furnishes here a convenient weapon against the *esse est percipi* principle which realists regard as the cardinal principle of idealism. For, if mind is accepted as a late emergent in the course of evolution, it follows obviously that the existence of the universe, prior to the emergence of mind, cannot be supposed to consist in its being perceived by mind. Nor is it only the *esse est percipi* principle which is thus overthrown, but a whole host of other philosophical difficulties is cleared out of the way at the same time. Notably, so Professor Sellars tells us, we get rid of the metaphysical dualism of Descartes and with it the soul-body problem conceived in terms of the interaction of two heterogeneous substances; also of the further (Kantian) dualism of a world of *facts* distinct from a world of *values*. Again, in epistemology, we avoid the separation of subject (Knower) and object (Known) as if they belonged to different worlds, and as if the subject knew only its own mental states ("subjectivism" eked out by the fiction of a "copy-theory" of truth). In short, evolutionary naturalism, on its realist side, sets itself, in Alexander's words, to "order mind to its proper place in the world of things."

Now, broadly speaking, it is easy to agree with evolutionary naturalism in its denials. The question is whether

its affirmations will stand. Does it really succeed in explaining knowledge as a natural phenomenon?

Before, however, we can examine this question, we must, in passing note the fact that realists, whilst agreeing on the program of treating mind as a natural phenomenon in a world which is independent of being apprehended by mind, differ widely from each other in what they assign to "mind" and what to "world" in their analyses of knowledge (or the "cognitive relation"). The "Critical" realists here oppose the "New" and the "Naive" realists, as we all know. Is the physical world, when object of apprehension, immanent in experience or does it remain transcendent? On this question the battle rages between "epistemological monists" and "epistemological dualists." Alexander limits mind to "enjoyed" acts of apprehension and treats whatever is apprehended as non-mental, independent reality. Sellars and Lloyd Morgan treat what is apprehended as mental, subjective, even "intra-organic," but referable to a non-mental independent reality. It would be easy to play the part of *textius gaudens,* and point to this fratricidal conflict among fellow-realists as presumptive evidence of a fundamental instability in the whole realist position. But, though many a telling debating-point might be scored by playing off realist against realist, I would rather examine the position on its merits. Only, for reasons of space, I must confine myself on this occasion to the examination of the "dualist" position as maintained with substantial agreement[8] by Lloyd Morgan and Sellars.

I draw attention, at once, to what is the crucial point, viz., the "naturalistic" context in which the analysis of mind and knowledge is to be undertaken. All context amounts to so many *presuppositions* taken for granted, and determining, as points antecedently fixed, the course of the subsequent analysis. The theory of mind and knowl-

[8] Cf. Lloyd Morgan, *Emergent Evolution, Appendix,* for the extent of this agreement.

edge to be constructed must square, so to speak, with the context initially assumed. Now, if this context is borrowed wholesale, as the "evolutionary naturalist" does borrow it, from the *sciences*—from biology, physiology, psychology—it follows that knowledge is used to explain and justify knowledge in a way which involves an illegitimate circle. For, the context of "nature," in which knowledge is to be explained as a natural phenomenon, is itself assumed to be known. Hence, whatever is said about knowledge as a phenomenon in this context must be consistent with the context itself being known, i. e., being what we think it to be. But if the account given of knowledge as a phenomenon in nature is such that it throws doubt on our knowledge of nature, i. e., on our claim that nature is what, in certain sciences, we think it to be, the argument destroys its own basis; the conclusion invalidates the premises on which it rests. Every science, as a branch of knowledge, reveals the nature of the objects with which it deals. To say that science "reveals" the nature of its objects is equivalent to saying that the objects really are what, as scientists, we perceive and think them to be, and this again, is equivalent to saying that we "know" the objects or that they "are known." To treat knowledge in *this* sense as a natural phenomenon, to be accounted for in a context conceived in biological and psychological terms, involves the circle of explaining and justifying our right to say that we "know," e. g., the physical world (i. e., that the physical world is what we think it to be), by means of an argument which, in employing as its premisses certain scientific theories of the nature of that world, takes that right for granted all along.

To put the criticism in another way: When we say that we "know," we claim for what we perceive and think a certain value, viz., "truth"-value, or a certain function, viz., the function of revealing the nature of the object as it is.

Now, under the title of "theory of knowledge" we may attempt *one* or *other* of two things, but we must *not* attempt *both* together, on pain of committing the vicious circle argument which I am concerned to expose. (1) We may either offer a theory of knowledge (or knowing) as an *event* or a sequence of *events,* occurring under *known* conditions in an individual mind. We can then make these conditions as "naturalistic" as we like, i. e., we can bring in, and base ourselves on, all else that is known and is relevant to our problem. We can use, without qualms, all the resources of physiology and biology, for we shall be using their propositions precisely not as events in any individual mind, but as "truths," i. e., as revelations of the real world in its bearing on the events to be explained here, *i. e.*, on the perceptions and thoughts considered as events in an individual mind. In explaining these perceptions and thoughts as events, we either abstract from, or take for granted—it does not matter how we put it—their cognitive function, their character as knowing, *i. e.*, as revealing the nature of objects. (2) On the other hand, we may mean by "theory of knowledge" an inquiry into the truth-value, truth-claim, reality-revealing function—call it what we will—of perceiving, thinking, reasoning *as such.* If this is our problem, we have no right to take the reality-revealing function of *some* cognitive acts for granted in order to justify our faith in the reality-revealing function of *all* cognitive acts. We have no right to start by assuming of certain systems of perceptions and thoughts, viz., those constituting certain sciences, that they reveal the real world, in order, on that basis, to explain and justify the reality-revealing function of perceptions and thoughts in general, including those entering into the texture of those sciences. Such a procedure would be parallel to lifting oneself up by one's own boot straps. In short, the circular argument of which I accuse the evolutionary natural-

ists consists in this that they mix up the theory of the occurrence of cognitive *events* with the theory of their cognitive (reality-revealing) *function.*

At bottom, the evolutionary naturalist's difficulties are due to the fact that his theory is simply an instance of a class of theories the common character of which is that they treat knowledge, in its character of "truth" or of "revelation of reality," as an empirically observable and describable relation between empirically observable and describable existents. But all such relations between such existents are objects of knowledge, are known. And no analysis of them, however searching or subtle, can explain or justify our confidence that they really are what we think them to be. The study of the "cognitive relation," as an empirical relation between empirical existents, and, therefore, as an object of "science"—this study, I say, presupposes the truth-value or reality-revealing function of the acts of perceiving and thinking by which we study this relation or (for that matter) anything else. This truth-value, or reality-revealing function, cannot, therefore, be made to depend on the issue of an argument which presupposes it all the time, and which, without that presupposition, could have no possible issue at all.

My argument, so far, has been in the nature of prosecuting counsel's speech for the prosecution. It is high time that I should now substantiate my charge by outlining, however briefly, the essential features of the evidence. Both Lloyd Morgan and Sellars begin with the typical "naturalistic" context. From the point of view of emergent evolution, so Lloyd Morgan reminds us, consciousness, or "conscious relatedness," as he generally prefers to say, has a history of bewildering complexity, for it comes late in evolution, and "requires the effective go of life as that requires the primary go of physical events."[9] Similarly, Sellars tells

[9] *Emergent Evolution,* p. 90.

us, that to understand knowledge we must regard it as a specialized activity on the part of percipients who, as psychophysical organisms, are scattered over the surface of the earth.[10] In such a context, the percipient or knower, must obviously be identified with the organism, the living body, surrounded by other bodies existentially distinct from it. For the percipient to know any other body (incidentally, what about knowing his own?), his body must enter into some sort of physical relationship with the other body. There must be stimulation (Lloyd Morgan's "advenient influence") from the one side and response from the other. But always the body perceived will remain "existentially distinct" from the percipient organism: it will transcend the latter; it will be "external" to it; it will remain literally where it always was—outside the other's skin. Meanwhile, the perceiving, as a conscious process or experience, together with all the nervous processes which it "involves" (Morgan), or with which it "is identical" (Sellars) will be existentially *in* the percipient. Whence it follows that the physical body known can never be brought into the field of experience, can never be an existential component thereof.[11] Interest now shifts to what goes on in the percipient's mind. There will be an "object" (Sellars), a "content" (Morgan), but, as mental and intra-organic, it will be existentially distinct from the external physical "thing" (Sellars) "object" (Morgan). It will be a mental sign of (Morgan), a "mental substitution for" (Sellars) the external thing. If we ask, How do we know it is a sign or what it is a sign for? we are told that we know it by an act of "acknowledgement," a "credal act," "not amounting to proof" (Morgan); by an act of "affirmation," which is not an inference, which is instinc-

[10] Paraphrased and abbreviated from an article on "Cognition and Valuation," p. 128 in *The Philosophical Review*, Vol. XXXV, No. 2.

[11] Cf. here Sellar's article, "Concerning Transcendence and Bifurcation," in *Mind*, Vol. XXXI, No. 121.

tive, which constitutes the cognitive function of mind, which "grasps" the very object, existentially distinct though the latter remains all the time (Sellars). If we ask for evidence of these acts and of their power to transcend the contents of the individual's own mind, we are referred back to physiology and biology. Thus Sellars: "This approach enables us to discover the factors in the total experience of perceiving responsible for the element we called the affirmation of the object. The attitude or set of the organism in perception floods consciousness with a sense of something co-real to which it is responding."[12] Similarly, Lloyd Morgan, beginning with an "external world in which things lie at a distance from the organism," and distinguishing thus the minded (=what is present to consciousness) from the acknowledged thing which exists outside the organism and its consciousness, declares that "behaviour towards *this* or *that* thing is the natural progenitor, under emergent evolution, of conscious reference to *this* or *that* object." Such is the "epigenetic origin" of the "projicient reference" which turns mental signs into knowledge—by faith, be it remembered, not by proof—of the non-mental thing.

If, lastly, we ask, What is the nature of the transcendent thing and how far do mental contents reveal that nature? I must confess that I have found no unambiguous answer in Lloyd Morgan. We have to make the best we can of such a statement as the following: "The properties which render physical things objective in mind are projiciently

[12] See article on "Epistemological Dualism versus Metaphysical Dualism," in *Philosophical Review*, Vol. XXX, No. 5, p. 487. The phrase "total experience of perceiving," in the above quotation, can hardly be meant to refer to the content of the percipient's consciousness. For, even if it be granted that the organism's motor-set contributes something to the content of consciousness, this could amount to a knowledge of the existence of a "co-real" beyond the organism only after affirmation has done its work, not before it, or in lieu of it.

referred to these things."[18] By comparison, Sellars is both clear and ingenious, in that, refusing to conceive the physical existent as a "thing" in which sensuous "qualities" inhere, and rejecting any copying of qualities by the mental content, he boldly asserts an "identity of pattern" between transcendent thing and mental object. The physical thing is "patterned or ordered stuff" (what sort of stuff?), the mental object is also patterned or ordered stuff, but a different sort of stuff. Thus the two stuffs are existentially and numerically different, but the pattern in both is identical (being a universal). Hence, so far as identity of pattern reaches, the mental object enables us to know the nature of the transcendent physical thing, the existence of which we already know by "affirmation."

I submit that in this summary of Sellars's and Lloyd Morgan's views an attentive eye will discover all the symptoms of the fallacy which I diagnosed above. First, various natural sciences are used as premises for the conclusion that the objects (or contents) of consciousness occur within the organism as part of its response to stimulation by physical objects other than it. Next, we are reminded that these mental and intra-organic objects (or contents) have a cognitive function. By means of them the organism knows itself as a physical thing in a world of physical things. They are the stuff of which the sciences themselves are made. But how invest them with a function which, in themselves, they are patently incapable of discharging? The answer is, By affirmation or acknowledgement, because these are the equivalent in consciousness of motor-response outside of consciousness. In scholastic language: affirmation is the *causa cognoscendi* of motor response to an independent physical world, which world, evoking motor-response, is the *causa essendi* of affirma-

[18] This leaves obscure both what exactly these properties are (e. g., secondary qualities as well as primary), and whether the projicient reference of properties to things is meant to be equivalent to the judgment that things really *are* so, or implies merely the relation of sign to significate. I suspect the latter.

tion. If this is not a circular movement from mental event to cognitive function and back again, what is?

Hence, I can not agree with Sellar's criticism of Whitehead,[14] for excluding theory of knowledge from his theory of nature, and restricting the latter to "the relations *inter se* of things known, abstracted from the bare fact that they are known." It is possible to include mind and knowledge in nature by treating them simply as events, as, indeed, they are treated by psychology. But it is not possible to answer, in the context of nature and of any natural science, the question, Is nature (or anything else) really what we experience and judge it to be? Yet this is what we mean when we say that we "know" nature (or anything else). So far as "idealists" have always seen the difference between these two points of view and pursued the latter on its merits into the distinction between "reality" and "appearances," which are yet "degrees of reality," they may claim to have done work of abiding value, which evolutionary naturalists, and others, forget or ignore at their peril.

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[14] See *loc. cit.*, *Mind*, Vol. XXXI, No. 121, p. 39.

INSTRUMENTALISM

LATE in the seventies of the last century two singularly gifted Americans, working on independent problems, arrived at original conclusions bearing on the nature and function of human thinking. Out of the amalgamation of their views a new philosophy took its rise. The better known published result of these labors is a paper by Charles S. Peirce. In recent philosophic literature frequent reference has been made to his article, "How to Make Our Ideas Clear," which appeared in January, 1878. In this article he attacked the doctrine that the clearness of an idea is an abstract quality which the idea wears on its face, discoverable by sufficiently persistent introspection. In contrast to this notion, Peirce maintained that "there is no distinction of meaning so fine as to consist in anything but a possible difference of practice."[1] He insisted that at the root of every real distinction of thought, no matter how subtle it may be, we come down to what is tangible and practical. "Our idea of anything," accordingly, "is our idea of its sensible effects; and if we fancy that we have any other we deceive ourselves, and mistake a mere sensation accompanying the thought for a part of the thought itself."[2] Or, to put it in another way: "The essence of belief is the establishment of a habit, and different beliefs are distinguished by the different modes of action to which they give rise. If beliefs do not differ in this respect, if they appease the same doubt by producing the same rule

[1] Peirce, C. S.: *Chance, Love, and Logic* (New York, 1923), p. 44. (Reprinted from *Popular Science Monthly*, Vol. 12, pp. 286-302.)

of action, then no mere difference in the manner of consciousness of them can make them different beliefs, any more than playing a tune in different keys is playing different tunes."[3] The position was summarized by Peirce in this much-quoted passage: "Consider what effects, which might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object."[4]

In so far as a philosophic movement may be said to have begun at a definite time, this essay has been taken to mark the beginning of Pragmatism. The word does not appear in the essay, although Peirce had been using it for two or three years in philosophical conversations;[5] but pragmatic doctrine is obviously there, and it is presented with perspicuity and force. As Peirce declares, his theory is the outgrowth of his laboratory experience. It is the expression of an attempt to slough concepts which have their "only true place in philosophies which have long been extinct," and to introduce the experimental, laboratory temper of mind into the whole range of human thinking. Thus the instrumental character of ideas is made to appear. They are shown to be rules of action, experimental means employed by man to get himself forward in the world.

In the same month and year was published the first essay from the pen of William James, under the title, "Remarks on Spencer's Definition of Mind as Correspondence."[6] The essay is sufficiently remarkable in itself, but it is even more significant as the prelude to all that James did as writer and philosopher. Not only is it written in the clean, fluent, urbane style for which James later became well known;

[2] *Ibid.*, p. 45.
[3] *Ibid.*, pp. 41-42.
[4] *Ibid.*, p 45.
[5] *Monist*, Vol. XV, p. 166, note.
[6] In the *Journal of Speculative Philosophy*, January, 1878, Vol. XII, pp. 1-18. Reprinted in *Collected Essays and Reviews*, New York, 1920, pp. 43-68. This paper had been preceded by book reviews and literary notices extending through a period of ten years in which, as we can now see, there were adumbrations of what was to come.

not only does it exhibit the same catholicity of interest, analytical keenness, and constructive imagination conspicuous in his maturer years; but it presents and defends the teleological conception of the human mind, of which his philosophy as a whole is the enriched and deepened elaboration. Rejecting the conception of mental activity which regards it as an act of corresponding to a world antecedently given, he argues that "interests which we bring with us, and simply posit or take our stand upon, are the very flour out of which our mental dough is kneaded. The organism of thought, from the vague dawn of discomfort or ease in the polyp to the intellectual joy of Laplace among his formulas, is teleological through and through."[7] Again, in a penetrating passage prophetic of what James, as pragmatist, was to contend for, he says: "I, for my part, cannot escape the consideration, forced upon me at every turn, that the knower is not simply a mirror floating with no foothold anywhere, and passively reflecting an order that he comes upon and finds simply existing. The knower is an actor, and co-efficient of the truth on one side, whilst on the other he registers the truth which he helps to create. Mental interests, hypotheses, postulates, so far as they are bases for human action—action which to a great extent transforms the world—help to *make* the truth which they declare. In other words, there belongs to mind, from its birth upward, a spontaneity, a vote. It is in the game, and not a mere looker-on; and its judgments of the *should-be*, its ideals, cannot be pealed off from the body of the *cogitandum* as if they were excrescences, or meant, at most, survival."[8]

This essay—which clearly enunciates the active, reconstructive character of human intelligence and emphasizes the validity of such non-cognitive elements of experience as preferences and ideals, and which presages the doctrine

[7] James, William: *Collected Essays and Reviews*, p. 61.
[8] *Ibid.*, p. 67.

that truth is a working-value of ideas—is a second source of Pragmatism. The word source is used in the face of what we know to have been James's intellectual obligations to Peirce. When, twenty years after this time, James inaugurated the pragmatist movement so to speak officially, he acknowledged his indebtedness to Peirce in the handsome manner characteristic of him.[9] And the acknowledgment had its basis in fact. He had known Peirce, who was only three years his senior, from at least his nineteenth year, and he was a member of the Metaphysical Club, started by Peirce, where in the early seventies "the name and the doctrine of pragmatism saw the light."[10] There can be no doubt that Peirce's logical genius had an influence on the more artistic temperament of James. But James did more than merely develop the ideas he got from Peirce —which is the impression one is apt to carry away from what has been written on the subject.[11] Letters and memoranda dating from the years 1869-1872—the critical period in James's emotional and intellectual life—make it sufficiently clear that the germinal idea of the philosophy advanced in his first printed essay was born out of a struggle so intimate, personal, and momentous that he hid the depth of it from those about him. The problem was a moral or religious, rather than, as with Peirce, a logical one. It con-

[9] *Ibid.*, p. 410.

[10] *Journal of Philosophy*, etc., Vol. XIII, 719.

[11] There are some exceptions. See especially A. K. Rogers: *English and American Philosophy Since* 1800, New York, 1922, p. 359ff.

It is true that Peirce, repudiating James' brand of Pragmatism, says, "No doubt he derived his ideas on the subject from me" (*Journal of Philosophy*, etc., Vol. XIII, p. 719). But the remark must be understood in its context. Peirce is not implying that James takes credit for ideas which he had in fact borrowed. On that question we have this statement from Peirce: "There never was the smallest dsloyalty on James's part. On the contrary, he dragged in mention of me whenever he could." (*Journal of Philosophy*, etc., Vol. XIII, p. 719.) He is objecting to the strange doctrines which James has introduced. He feels that he must acknowledge responsibility for such *true* pragmatic elements as James's philosophy may include, but he wishes it understood that the philosophy current under the name Pragmatism differs profoundly from the theory that had its rise with him. (Cf. Peirce's reasons for changing the name Pragmatism to Pragmaticism. *Monist*, Vol. XV, p. 162.) See also, Violet Paget's stimulating book, *Vital Lies*, London, 1912, more particularly Vol. I, Chap. 1.

cerned man's place in the universe, a problem which at the time was disturbing many thoughtful youths who had come under the influence of Herbert Spencer's universalization of Evolution.[12] Put in a sentence the problem was this: Is man impotent and meaningless in the whole of things or are human individuality and power of initiative real? And until he had hit upon what seemed at least a possible way of validating man's significance, James was weighed down by a sense of frustration. How deeply depressed he was is vividly suggested by his portrayal of the experience which, thirty years later, he incorporated in his treatment of the "sick soul" in *Varieties of Religious Experience,* there attributing it to an anonymous "French correspondent."[13] "If I had not clung to scripture-texts like *The eternal God is my refuge,* etc. [so the account concludes] I think I should have grown really insane."[14]

Under date of April 30, 1870, a new note is sounded. "I think," James writes, "that yesterday was a crisis in my life. . . . Hitherto, when I have felt like taking a free initiative, like daring to act originally, without carefully waiting for contemplation of the external world to determine all for me, suicide seemed the most manly form to put my daring into; now I will go a step further with my will, not only act with it, but believe as well; believe in my individual reality and creative power. My belief, to be sure, *can't* be optimistic—but I will posit life (the real, the good) in the self-governing resistance of the ego to the world. Life shall [be built in] doing and suffering and creating."[15]

[12] James's friend, John Fiske, had no difficulty in turning Evolution to moral and religious account, but Fske was incurably optimistic. The two friends debated a phase of the subject in the *Atlantic Monthly,* Vol. XLVI, pp. 441ff.; XLVII, pp. 75ff. And in connection with this debate James good-naturedly acknowledged a "spanking." James's article is reprinted in *The Will to Believe,* Chap. 7. See also Clark, J. S., *John Fiske,* Vol. II, pp. 192-199. Mr. Clark does not understand James and he is too worshipful of Fiske ever to question his position.

[13] *Letters,* Vol. I, pp. 144-147.

[14] *Ibid.,* p. 147.

[15] *Ibid.,* p. 148.

This note of victory was immediately induced by the reading of Renouvier, and James, it is well known, remained all his life "endlessly thankful" for the decisive impression made upon him at this time by Renouvier's "masterly advocacy of pluralism," but for which he fears he might never have freed himself from what he calls the "monistic superstition."[16] James's debt to Peirce, as we have indicated, was not of a superficial sort; it is expressed with his unfailing aptness in the dedication of *The Will to Believe*.[17] But it was Renouvier who touched the deeper need of his being; who gave him a supporting push at a critical stage in the ascent to a point of vision.[18]

It must not be forgotten that the man who is influenced has something to do with the influence. Unquestionably the 1878 essay owed much to others. James was an extraordinarily wide, appreciative, and meditative reader. It owed even more to the unique genius of its author. And this is true of his work as a whole. The contributions made by himself not only far outweighed what he took from others, but he gave to his philosophy the rare quality peculiar to it. There can be no doubt that James would have acknowledged the important bearing of his own mental and emotional idiosyncrasy; would have admitted that he became the Pragmatist he did become because (borrowing words of his own) the instability of his brain was "such as to tip and upset itself in just that particular direction."[19] We, looking back upon his thought from a position which sets it in perspective, can recognize that the philosophic current which he caused to move into the spiritual life of his time, while affected by the confluence of streams of in-

[16] James, William, *Some Problems of Philosophy*, p. 165.

[17] "To My Old Friend, Charles Sanders Peirce, To whose philosophic comradeship in old times and to whose writings in more recent years I owe more incitement and help than I can express or repay."

[18] See, among other things, *Letters*, Vol. I, 186. Cf. pp. 80, 149.

[19] "Great Men and Their Environment," in *The Will to Believe*, p. 249. This essay is of peculiar interest in this connection.

fluence, yet owed its volume, its contour, and its rhythm chiefly to James himself.[20]

When these essays by Peirce and James were published, a youth of nineteen was completing his college course in Burlington, Vermont, who was to give to Pragmatism the developed form by which it will probably be known in the history of thought. Graduating a year later, John Dewey had already heard the call of philosophy, but it was not a philosophy which reflected the American scene. That phase was still to come. Mr. Dewey began, as he himself tells us, as a Neo-Kantian.[21] As late as the beginning of the present century Peirce refused to accept him as a pragmatist, placing him with those who "hover between Absolute Idealism and Sensationalism."[22] This characterization overlooked developments which had been taking place for at least a decade. At the moment it was written Mr. Dewey was collaborating with Drs. Ashley, Gore, Heidel, McLennan, Moore, Stuart, and Thompson on a volume entitled *Studies in Logical Theory*, which, upon its publication in 1903, laid the foundation of the instrumental

[20] The limits set for this paper do not permit a discussion of Hans Vaihinger's *Die Philosophie des Als Ob*, a notable work also dating from the period under discussion and showing striking affinities with Pragmatism. The teleological character of mental activity, the instrumental function of ideas, the creative conception of truth—these, and other doctrines congenial to the pragmatic temper, are brilliantly defended. The erudition and orginality of the author are conspicuous. Unfortunately the book was not published until 1911, a year after James's death. One can easily imagine the reception he would have endeavored to secure for it. The English translation did not appear in America until 1924. The reception of Vaihinger's work by the American pragmatists has scarcely been hearty. He, on his side, seemed anxious (in the Preface written nearly a generation after the completion of the book) to avoid being classed with the pragmatists. In a letter to the writer in the spring of 1925, Vaihinger explains that his objections were not aimed at James, Dewey, or any form of "critical Pragmatism," but at the "uncritical Pragmatism" which ignorantly distorts and exaggerates what is valuable in this philosophy. This regrettable failure in mutual acquaintance and understanding is well considered in James Gutmann's recent review of Vaihinger's book. (*Journal of Philosophy*, Vol. XXIII, pp. 77-80.) I think with him that "there seems to be here an interesting and unconsidered instance of a significant community of thought." And I hope with him, that it may be replaced by "an international 'comparing of notes'."

[21] *Revue de Metaphysique et de Morale*, Vol. XXIX, p. 423. Reprinted in *Studies in the History of Ideas*, N. Y., 1925, Vol. II, p. 368.

[22] *Journal of Philosophy*, Vol. XIII, p. 720.

school. James, with his usual sensitiveness and quickness of appreciation, hailed the book with enthusiasm. "I have the duty on Monday," he wrote, "of reporting at a 'Philosophical Conference' on the Chicago School of Thought. Chicago University has during the last six months given birth to the fruit of its ten years of gestation under John Dewey. The result is wonderful—a *real school*, and *real Thought*. Important thought, too! Did you ever hear of such a city or such a University! Here we have thought, but no school. At Yale a school, but no thought. Chicago has both.[23] Mr. Dewey's four chapters of thoroughly pragmatistic doctrine had been preceded, in 1900, by his equally pragmatistic paper, "Some Stages in Logical Thought," and the instrumentalism thus avowed has been expanded, deepened, and clarified during the intervening quarter of a century.

It is not without significance that Mr. Dewey, on completing college, broke with the tradition of going abroad for graduate work, and, instead, joined the small group of able young men who took advantage of the opportunity for graduate study then newly offered at Johns Hopkins. Nor is it without significance that he sought his career, although an academic one, not in the ripened East, but in the unformed society of the West. Although born in New England, he was a child of America. His academic service began in Minnesota only a decade and a half after the close of the Civil War, and his formative years, as a pragmatist, were spent in Chicago. From Michigan, in one of his earliest papers, published nearly forty years ago, at a time when democracy was under fire in the older centers of education, he became philosophic spokesman for the democratic ideal.[24] He was then a Neo-Kantian, and the paper shows interesting traces of this; nevertheless in his

[23] *Letters*, Vol. II, pp. 201-202.
[24] "The Ethics of Democracy," in *University of Michigan Philosophical Papers*, Second Series, No. 1 (1888).

defense and interpretation of democracy he laid down a cardinal principle of the philosophy now known as Instrumentalism. Democracy, as an instrument of a shared and progressively ennobled common life, has been and is the central aim of those who belong to this school of Pragmatism. A. W. Moore, one of the keenest, most valiant instrumentalists, finds it an implication of Pragmatism that "social organization be essentially (whatever its name) that of a social democracy as against all forms of hierarchism";[25] while B. H. Bode, another of the gifted leaders of this pragmatic persuasion, voices his faith in these words: "The whole drift of things has been towards the interpretation of the right to life, liberty, and pursuit of happiness in the sense that we are members one of another, with a common share in our common life. No one, not even the humblest citizen is to serve simply as a hewer of wood and a drawer of water; but everyone is to be recognized as a member of a great brotherhood, and to share in the opportunities, the achievements, and the aspirations which are our common possessions. There are to be no peasants, no serfs, as there are no hereditary privileges and titles, because each citizen is to rise to the full stature of his spiritual manhood, even as a son in his father's house."[26] From J. H. Tufts, an outstanding member of the group, we have an illuminating study of the historical development of democracy intended to give us a juster and finer appreciation of our form of society;[27] and it need scarcely be mentioned that one of Mr. Dewey's most influential books is called *Democracy and Education*. One cannot read the writings of instrumentalists without sensing the depth of their democratic convictions. They think of Pragmatism as the philosophic counterpart of the democratic movement in

[25] *Pragmatism and Its Critics*, Chicago, 1910, p. 22. Cf. p. 72.

[26] From an address on "Our Great American Tradition," printed in *School and Home Education*, Vol. XLI, p. 94 (1922). See also *Fundamentals of Education*, New York, 1921, Chap. III.

[27] *Our Democracy, Its Origins and Its Tasks*, New York, 1917.

modern society, and it would not be wrong to say that for most of them Democracy is Religion.

This interest in democracy is no more characteristic than the sort of democracy it is attached to. In the early article by Mr. Dewey he stresses the necessity of making a distinction between the numerical and ethical concept. "To define democracy simply as the rule of the many," he there says, "as sovereignty chopped up into mince meat, is to define it as the abrogation of society, as society dissolved, annihilated."[28] Against this conception, conceived after the analogy of the abstractions of physical science, he objects throughout the paper. "There is an individualism in democracy," he admits, "which there is not in aristocracy; but it is an ethical, not a numerical individualism; it is an individualism of freedom, of responsibility, of initiative to and for the ideal, not an individualism of lawlessness. In one word, democracy means that *personality* is the first and final reality. . . . It holds that the spirit of personality dwells in every individual and that the choice to develop it must proceed from that individual."[29] And this he goes on to show involves democracy of wealth and industry, a society in which "all industrial relations are to be regarded as subordinate to human relations," in which economic and industrial life shall be a social function.[30] In more recent writings the emphasis is upon *distinctness* of personality. Society is deemed democratically efficient to the extent that it develops the incommensurable something which constitutes its citizens individuals. For "if democracy has a moral and an ideal meaning," says Mr. Dewey now, "it is that a social return be demanded from all and that opportunity for development of distinctive qualities be afforded all."[31] But this is the same conception fashioned

[28] *University of Michigan Philosophical Papers,* as cited, p. 7.
[29] *University of Michigan Philosophical Papers,* pp. 22-23.
[30] *Ibid.,* pp. 26-27.
[31] *Democracy and Education,* p. 142.

in response to contemporary needs. It is at any rate democracy after this pattern—a life together which shall enhance the significance of each life—that these gentlemen have at heart and aim to conceptualize. Under the spell of this vision they speak in glowing terms such as these: "Democracy and the one, the ultimate, ethical ideal of humanity are to my mind synonyms."[32] "This great national faith in the common man is the first political recognition, on a large scale, of the immeasurable worth of the individual human soul. It is our national holy of holies, the shining ideal which we call America the Beautiful."[33] And if it be objected that such interests, while becoming to a social reformer, derogate from the dignity of a philosopher, an answer is at hand in Mr. Dewey's latest book. "Social Reform," he says, "is conceived in a Philistine spirit if it is taken to mean anything less than precisely the liberation and expansion of the meanings of which experience is capable. . . . Nothing but the best, the richest and fullest experience possible, is good enough for man."[34] What therefore can be nearer to philosophy than the problem of rendering this best more general, more significant, and more secure, through the comprehensive criticisms of values?

Closely related to the social theory of Instrumentalism is its psychological theory. On the face of it, this is behavioristic. "I should also like to point out," says Mr. Dewey in reference to a series of articles, "that the essays in their psychological phases are written from the standpoint of what is now termed behavioristic psychology."[35] And this is certainly supported by many passages that might be cited from his writings, such as this one: "Concrete habits do all the perceiving, recognizing, imagining, recall-

[32] Mr. Dewey, in *University of Michigan Philosophical Papers*, p. 28.
[33] Bode, in *School and Home Education*, p. 94.
[34] *Experience and Nature*, pp. 411, 412. For some direct applications of this interest see Smith, T. V., *Notes on the American Doctrine of Equality*, Chicago, 1925; Thayer, V. T., "Democratic School Administration. in *Educational Administration and Supervision*, Vol. II, 361ff.
[35] *Essays in Experimental Logic*, p. vi.

ing, judging, conceiving, and reasoning that is done."[36] Or again: "A mind or consciousness or soul in general which performs these operations is a myth";[37] and "the scientific man and the philosopher like the carpenter, the physician and politician know with their habits not with their 'consciousness'."[38] Yet in close proximity to these passages appear others of a different purport. The reader is told that habit does not, of itself, know, for it does not of itself stop to think, observe, or remember."[39] And a few sentences further on, the knowledge which lives in habits is denied to be knowledge, except by courtesy; and knowledge, in the strict sense, is said to be "knowledge *of* and *about* things, knowledge *that* things are thus and so, knowledge that involves reflection and conscious appreciation."[40] To which must be added the fact that the most widely known behaviorist is peculiarly anxious to protect behaviorism from being contaminated by pragmatic psychology,[41] and that the leading pragmatist reciprocates by accusing behavioristic psychology of "aping the manners of physics."[42] It is clear, then, that the movement with which the behavioristic tendency originated and which has steadily extended the range of the behavioristic principle of explanation, is yet fundamentally antagonistic to *pure* behaviorism.[43]

The difference between pragmatic and pure behaviorism has developed three main foci. The latter theory reduces human behavior solely to "a segment of the cosmic move-

[36] *Human Nature and Conduct*, p. 177.
[37] *Ibid.*, p. 176.
[38] *Ibid.*, p. 182. A thoroughly characteristic discussion is Ethel Sabin's brilliant paper, "Giving Up the Ghost, in *Journal of Philosophy*, Vol. XVII.
[39] *Human Nature and Conduct*, p. 177.
[40] *Ibid.*, p. 178.
[41] Watson, J. B.: *Psychology from the Standpoint of a Behaviorist*, Phila., 1924 (2nd Ed.), pp. vii-viii.
[42] Dewey, J., in *The New Republic*, Vol. XLV, p. 361.
[43] This antagonism to behavioristic exaggeration is already suggested in Peirce's criticism of James's sensationalism, and James's criticism of Spencer's mechanical conception of mental action.

ment continuum,"[44] making psychology a branch of mechanical physics; the former insists upon the presence in human behavior of experimental, purposive, and meaningful activity, without which, according to this view, psychology is deprived of subject-matter. Back of this divergence and responsible for it is the determination of one set of investigators to take experience at its face value, and an equal determination of another set of investigators to reject so-called experience as a tissue of illusions and to accept as real only the world of electrons and protons.

If experience is taken as it comes, the instrumentalists hold, and not illegitimately reduced to something else, we must recognize a tentative, feeling-its-way kind of behavior met with nowhere in the realm of mechanics. In such cases the stimulating environment calls forth a variety of competing responses; these block one another, thereby disintegrating activity. The resulting state of the organism is one of equilibrium, of hesitancy. The process of changing this equivocal stimulus into a univocal one, thus making possible a unified response, is thoroughly experimental in character. The various possible competing actions are imaginatively projected and compared, until a mode of activity is achieved which can serve as a direct stimulus to overt action.[45]

Out of this type of experimental behavior grows purposive action, action guided by the thought of foreseen consequences. When a consummation has once been hit upon it may thereafter become an objective, an end of conscious endeavor. These ends do not exist outside of, or distinct from, action; they are instrumental functions of

[44] Weiss, A. P.: *A Theoretical Basis of Human Behavior*, Columbus, 1925, p. 80. See also Chap. XVII.

[45] Dewey, *Human Nature and Conduct*, pp. 189-198; Bode, B. H.: "What Is Psychology," in *The Psychological Review*, Vol. XXIX, pp. 250-258 (especially pp. 255ff.); "Consciousness and Psychology," in *Creative Intelligence*, New York, 1917, and "Intelligence and Behavior," in *The Journal of Philosophy*, Vol. XVIII, pp. 10ff. See also, in the same volume, the highly suggestive discussion of a germane phase of the subject by H. W. Stuart.

behavior; but *in* this behavior they are deliberately employed to shape the course of events. Ends are aims, or, rather, *aimings,* by means of which activity is steadied and directed. Unique in their individual operation, they may nevertheless incorporate past experiences of the actor or draw upon those of others. They are conscious devices which, when employed, transform mere sequence of behavior into coherent projects for attaining foreseen consequences.[46]

A third divergence from Behaviorism grows out of radical disagreement on the subject of meaning. Instrumentalism holds that meanings indubitably occur. They are not psychic entities, though in view of their significance for life it is natural that some thinkers should hypostatize them as essences, thinking of them as by right subsisting eternally in the unchanging realm of spirit, though fortunately captured now and again in a brief, imperfect actualization, bringing sweetness and light to an earthly existence that is brutal and meaningless without them. Meanings are properties of behavior; they have their origin in language, in discourse. Mr. Dewey looks upon communication as the world's supreme wonder, because "it changed dumb creatures—as we significantly call them—into thinking and knowing animals and created the realm of meanings."[47] But language must not be confused with the signal reflexes of animals to which behaviorists would reduce it. Signaling acts are ego-centric, language is participative. A hen's clucking may call forth a response from a chick but it is not induced in any way by the response it calls forth. A gesture, say, gets meaning, as Mr. Mead well expresses the matter, when "the individual takes the attitude of another toward himself, and in some sense arouses in himself the tendency to action, which his con-

[46] See *Human Nature and Conduct,* Part 3, Sections 6-7; *Experience and Nature,* Chap. III.

[47] *Experience and Nature,* p. 166.

duct calls out in the other individual."[48] For "it is not enough that he should indicate this meaning—whatever meaning is—as it exists for himself alone, but that he should indicate that meaning as it exists for the other to whom he is pointing it out."[49] Signals become signs, sounds become words, when they occasion action which takes its specific character from being the common endeavor of at least two centers of activity; when they induce reciprocal cross-reference and joint anticipation which, when acted out, result in a conjoined undertaking, regulated, as to each partner, by his participation in the partnership. And when meanings have developed, they may, as Mr. Dewey says, "be infinitely combined and rearranged in imagination, and the outcome of this inner experimentalism—which is thought—may issue forth in interaction with crude or raw events."[50] Through the experience and expansion of meanings human life attains to the coherence of growth and the enrichment of culture.[51]

The views adumbrated in this too brief survey involve others. If in experience, taken as authoritative, genuine deliberation occurs and issues in the choice of an alternative that adds meaning to existence, then we live in a world which is in a real sense indeterminate; "a real world," as Mr. Mead puts it in one of the profound documents of philosophical literature, "which consists not of an unchanged universe, but of a universe which may be continually readjusted according to the problems arising

[48] Mead, G. H., *Journal of Philosophy*, etc., Vol. XIX, p. 161.

[49] Mead, G. H., *ibid.*, p. 160.

[50] *Experience and Nature*, p. 166.

[51] Mead, G. H.: "A Behavioristic Account of the Significant Symbol," in *Journal of Philosophy*, etc., Vol. XIX, pp. 157-163. Compare with this his "Social Consciousness and the Consciousness of Meaning," in *Psychological Bulletin*, Vol. VII, pp. 397-405. Dewey, J., *Experience and Nature*, Chap. 5. The coming decade should supply us with important data throwing light on the problem of meaning. Mr. Koehler's and Mr. Yerkes' studies of higher apes are reopening the question of the place of deliberately adaptive behavior in animal life. It would seem that pragmatists face the dilemma of granting more "mind" to apes or less to men.

in the consciousness of the individuals in society."[52] There is, then, freedom of action; not freedom to act unconditionally, but freedom in "formulating the ends toward which our conduct shall be directed."[53] In such a world the real and the ideal will be conceived to be continuous in the flux of events; *things* being achieved objects on which we can depend, *ideals* possible objects yet to be made into dependable things. And if the objects of experience are features of reality, ideas which lead us into propitious relation with them are true—true to us in our need. There is, consequently, no quarrel between pragmatistic philosophy and nature. Nature, it is true, is not assimilated to man's desires, but it is recognized as the condition of all achievement; and knowledge is the articulate awareness of the conditions. The quarrel of Pragmatism is with those social, industrial, and economic circumstances, those blind prejudices and customs, those inhibiting concepts regarding man and his environment which stand in the way of higher individual and communal attainment. Its goal is not narrowly utilitarian, as has been so often asserted and as often denied. Room is left, *most* room is left, in Mr. Moore's words, for "objects of contemplation, adoration, love, and worship."[54] It welcomes the opportunity to assist in redeeming knowledge from materialism, and appreciation from tribalism.[55] Rooted in American soil, growing in response to a newer civilization's hunger for higher satisfactions, Pragmatism is precisely the philosophy that strives to discover and to render pervasive and secure all that makes life meaningful and precious. The aim of philosophy so conceived, as we have been told by Mr. Kallen, who takes us back to the immortal James' "is the liberation and enlargement of human capacities, the enfranchisement

[52] Mead, G. H., *In Creative Intelligence*, p. 223.
[53] *Ibid.*, p 224.
[54] Moore, A. W.: "Some Lingering Misconceptions of Instrumentalism," in *Journal of Philosophy*, etc., Vol. XVII, p. 515.
[55] Moore, A. W., in *Philosophical Review*, Vol. XXVII, p. 129.

of man by the actual realization of values. Where it is successful, beauty and use are confluent and identical with it. It converts sight into insight. It infuses existence with value, making them one. It is the concrete incarnation of Creative Idealism."[56]

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[56] Kallen, H. M., in *Creative Intelligence*, p. 467.

LOGICAL THEORY

THE purpose of the following article is to give an account of some outstanding tendencies in contemporary logical theory in the English-speaking world. One important movement, however, need not demand our attention here. For, what is somewhat inappropriately labeled, in some quarters, "instrumental" logic, is discussed in another article of this series.

Almost any elementary text book is an epitome of these various remaining tendencies. Such a book usually follows, in fundamentals, the Aristotelian tradition. That is to say, it treats of propositions and their parts, of the forms of "immediate" inference, of the syllogism, of the several types of judgment, etc., etc. Just at the present moment it is fashionable to add supplementary chapters on symbolic or mathematical logic—chapters which rather inadequately and half-heartedly explain the application of symbolism to logical problems, and define such technical conceptions as "class," "relation," and "implication." This usually concludes the analysis and description of the so-called deductive inference. In spite of its failure—if indeed it may be called such—to devote more than passing reference to the labors of the logisticians, Mr. J. N. Keynes' *Formal Logic*[1] has earned its place as one of the classic works in this field.

As for induction, most logicians conventionally and uncritically assume that it is an "inverse" process, that it

[1] London, Macmillan Co.

somehow presupposes acceptance of the principle of the Uniformity of Nature, and that it results in the formulation of a general law covering, with a high degree of probability, *all* the "instances" of which only a certain number actually have been examined. Accordingly, there follows an exposition, more or less elaborate, of Mill's inductive methods, and of the use of analogy, statistics, and hypothesis, as aids to the inductive process. The special subject of mathematical probability often proves an embarrassing one, but tradition demands its inclusion as part of any complete introductory text book.[2] And other chapters may be added on the effect of evolution on logical theory, on fallacies, and—as the capstone of the entire structure—on scientific inference in general. It should be emphasized that as thus popularly conceived the problem of induction, like all inverse problems, becomes *ipso facto* indeterminate—the result of inductive inference can be only probable and not certain. The whole task of inductive logic therefore consists in the formulation of formal tests for the determination of various degrees of probability—a formulation based upon a division of induction into several different species, *e. g.*, complete enumeration, incomplete enumeration (or "imperfect" induction), etc. Thus in the conventional sense induction always has to do with a number of instances.

Some logicians, however, look critically upon this standpoint. The late Professor Cook Wilson, for example, argues (in his *Statement and Inference*[3] that the term "inverse" is not one-sided but two-sided, and that consequently there is serious danger of being misled by an uncritical use of the term when it is descriptively applied to a process of inference. Indeed, as Wilson further points out,

[2] Mention should be made here of Mr. Keynes' important and highly original work on this subject; namely, *A Treatise on Probability*. London, Macmillan Co., 1921.

[3] Published posthumously. Two volumes. Oxford, Oxford University Press, 1926.

it is highly questionable whether induction is really a matter of instances at all. If we were to free ourselves from the perhaps unnecessary encumbrance of a word, and were to turn to an unbiased analysis of the process of scientific inference as our material, we might find ourselves returning in essentials to the Aristotelian view. That is to say, for Wilson induction seems on examination to be a "gradual process by which the mind comes to recognize, in the abstract and apart from all particular instances, a principle which it has been using in the particular instances."[4] Induction so conceived is not an inference of, or to, the validity of the universal law *from* the existence of the particular instances as such, but a process by which we are brought "to think of the universal principles in abstraction from the particulars in which we first thought the universal."

However that may be, our elementary text-book actually represents a loose conjunction of two or three different tendencies in contemporary logical thought, *e. g.*, that towards a greater formalization and *a priorism*, that towards empiricism and positivism, and that towards a development of Hegel's doctrines. As a practical expedient, demanded by the conditions of brevity, one may classify most present-day writers under one or the other of these three headings. (It is understood, of course, that the reader will bear in mind the important exception accounted for at the beginning.) Among the formalists one might include, pre-eminently, such authorities on mathematical logic as H. MacColl, and Bertrand Russell, in England, and Professors C. I. Lewis and Henry Bradford Smith, in America.[5] Mention should also be made of the original contributions to formal logic of Dr. Christine Ladd-Franklin, and more especially of her important articles in Bald-

[4] *Op. cit.*, p. 582.

[5] For a bibliography see Lewis, *A Survey of Symbolic Logic.* Berkeley, University of California Press, 1918.

win's *Dictionary of Philosophy and Psychology*. Karl Pearson, author of the famous *Grammar of Science*,[6] is a prominent representative of the empirical-positivistic point of view, and Mercier's *A New Logic*[7] should also be noted in this connection. Lastly, there are many important works by writers whose doctrines may perhaps be most aptly described in a general way as a continuation of the Aristotelian-Hegelian tradition. In this group, in spite of very significant differences, we may include Mr. Joseph's *Introduction to Logic*,[8] and the well-known writings of Bradley, Bosanquet, Creighton, and others.[9]

There remain, for separate notice, certain interesting treatises which in a special way combine the formalistic and empirical standpoints. Professor Montague's *The Ways of Knowing* and Mr. Johnson's *Logic*[10] are works which share in common at least the general spirit of this movement. In order to appreciate the full significance of these works, however, we must first briefly call attention to some of the characteristic features of formalism and empiricism, respectively, as they appear in contemporary thought.

First of all, it is typical of the age that ordinary syllogistic logic should come in for serious criticism. The mathematical logician, and the empiricist, as well as those who have shared in the development of "modern" logic, fully agree that the conception of inference as syllogistic is incomplete and shallow. But the agreement ends where it

[6] Third Edition, London, 1911.

[7] London, Heinemann, 1912.

[8] Second Edition, Oxford, 1916.

[9] *E. g.*, Bradley, *The Principles of Logic*, 2 vols., second edition, Oxford, 1922; Bosanquet, *Logic*, 2 vols., second edition, Oxford, 1911; Creighton, *An Introductory Logic*, fourth edition, New York, 1922. In the sequel these works wll be referred to under the head of "modern" logic.

[10] Professor Montague's work appeared in 1925 (New York, Macmillan), and we refer here especially to Part I of that work, "The Six Methods of Logic." Mr. Johnson's work is still incomplete. He has published three volumes, entitled respectively Logic, Part I (1921); Part II, Demonstrative Inference: Deductive and Inductive (1922); and Part III, The Logical Foundations of Science (1924). A final volume on Probability is already in preparation. Cambridge, Cambridge University Press.

began, for each group has its own idea of how to make good the deficiency. Observing incidentally that quantitative comparisons—equality, inequality, etc.—are not naturally expressible in syllogistic form, certain thinkers have gone on to analyze in detail the nature of mathematical inference. And while the principal stimulus for this investigation is doubtless the endeavor to establish a completely formal, abstract foundation for pure mathematics, one important side issue is the criticism of traditional syllogistic logic from this point of view. The syllogism, so the criticism proceeds, can treat adequately only of relations of whole and part, of class inclusion. But even in ordinary mathematics one encounters, as has been pointed out frequently enough, relations of quite different kinds. And, generalizing, we may conceive the main preliminary task of logic as that of discovering and classifying the various different possible types of relations by means of which experience may be ordered and organized. Then, regarding this task as accomplished, at least in principle, the mathematical logician will in the next place seek to define a set of conceptions and to formulate accurate and simple rules of operation for the guidance and control of any deductive inference whatsoever. When securely based upon such purely generalized "logical" grounds, pure mathematics would stand forth as *the* science of deductive reasoning, *par excellence*. In this sense of the word deduction means simply the rigorous application of the rules of substitution and "implication" to whatsoever subject-matter, while the correlative aim of the procedure is to guarantee the absolute certainty of its conclusions.

Generality and rigor are favorite watchwords of this school of thought. Other students of logic, however, point to the abstractness of the fundamental conceptions and the artificiality of the mechanical operations by means of inarticulate symbols, which, they maintain, is no less charac-

teristic of it. Deduction, on this other view, whether syllogistic or "mathematical," is at best only a means of verification; it can advance to nothing new, for, just by virtue of its adherence to abstract formalism, it is manifestly out of contact with any fructifying experience. The long dispute among formalists themselves as to whether thought really "creates" or merely "discovers" truth, substantiates, for the empiricist, this contention. Positively, the empirical logician holds that logic's main function is to determine the method by which new truth may be acquired. And, as we have already seen, all genuine knowledge must be founded on (sense) experience—or, what amounts here to the same thing,—on experience of particular instances or cases. The logic of induction accordingly emphasizes the experimental nature of concrete scientific inquiry, and satisfies itself with an account of how the employment of simple conceptions and rules lead the investigator to a more or less probable generalized conclusion. We reason, so we are informed, from certain cases in past experience, by application of the principle of similarity or resemblance, to other like cases in the present or future. It is implied that if we like we may discover, by an analysis of examples of inductive reasoning, the rules or "canons" which effect the operation of the principle.

We are now prepared to estimate the significance of the doctrines of Mr. Johnson and Professor Montague, regarded as a combination of these two superficially different types of logical theory. The possibility of such a combination[11] turns upon an independent analysis of the nature of mathematical inference. In brief, both of these thinkers question the somewhat widespread doctrine that mathematics is a pure deductive science; rather, they maintain,

[11] Or, to use a word suggested by Professed Montague (*op. cit.*), of such an "alliance." This authority finds that there are in all six possible "methods" in logic: *i. e.*, besides rationalism and empiricism, we have authoritarianism, mysticism, pragmatism, and scepticism.

all science employs both deductive and inductive methods. In other words, what differentiates mathematical inference from inference in the other sciences is the quality of absolute demonstrative certainty which attaches to its generalizations, as contrasted with the greater or less degree of probability which is all that can be claimed for the laws, say, of physical science. Again, both writers hold that the processes of deduction and induction are equally amenable to rule and that the principles upon which each depends can be clearly and distinctly formulated. Induction, for example, is simply a process of elimination. This is the real meaning of Mill's methods, which are rules or canons—perhaps in need of some critical revision—for the application of this process to various particular cases.[12] Deduction, of which, we are to remember, induction is the "inverse" process—also depends upon the determination of specific rules for combining and separating the epistemological atoms (or "particulars") which according to this theory are the ultimate elements of the logician's universe.

Now it is at once obvious that these types of logical theory—the formalistic-deductive, the empirical-inductive, and the combination or alliance of the two—represent a considerable departure from the standpoint of Plato and Aristotle. Confining ourselves for the moment to the narrower issues, the most striking fact, doubtlessly, is the changed conception of the very function of logic. For Aristotle, in particular, logic was primarily the science which investigated the way in which the then existing bodies of knowledge had been acquired and systematized. It was an attempt to discover the presuppositions, and to analyze the structure of knowledge, as it existed, or could exist, *e. g.*, in the sciences, in the form of objective truth. And the persistence with which we still venerate the letter even where the spirit of this doctrine is notoriously absent, is a

[12] Joseph, Hobhouse, and others also concur, to a greater or less extent, in this view.

unique tribute to the genius which originally animated it. Nowadays, on the other hand, in the above-mentioned quarters at any rate, the function of logic is very differently construed. Instead of attempting to understand the process of reasoning or inference, by studying its characteristic products, it is decidedly the fashion to demand of the logician a set (or sets) of rules constituting a technique for the guidance and control of reasoning. This involves, of course, a very definite limitation and prescription of the intellectual activity to certain predetermined forms and ends. An unkind critic would even be tempted to say that the aim of such doctrines is to construct a mechanical substitute for the manual labor of the intellect.

With regard to the wider implications of these contemporary views only a word can be said. If logic is to become a technique of reasoning naturally certain fundamental problems arise which had no place on the classical view. For example, the so-called epistemological problem of how and what we can know, or of justifying our confidence in the operation of the technique, when applied to any given subject-matter, becomes of vital importance. And secondly there is the "metaphysical" or cosmological problem of independently determining the nature of the subject-matter-in-itself, as it is in its own existential right, apart from our knowledge of it. This problem, indeed, some would gladly delegate to science, and this—one may suspect—is what is sometimes meant by the declaration that philosophy must become scientific, or that in our study of nature we must carefully abjure all transcendentalism and metaphysics.[13]

In the space remaining at our disposal we must do our best to convey some idea of the significance of what we have agreed to call "modern" logic. This movement is often described as a continuation and development of

[13] Cf. the writings of Dr. Whitehead for an expression of the doctrine that a philosophy of nature might better be called a "pan-physics" than a metaphysics.

Hegelian principles and doctrines. Its leaders nevertheless recognize the need of adopting a critical attitude towards that great thinker, and they also freely acknowledge indebtedness to logicians of other schools—notably to Lotze, Sigwart, Jevons, Mill, and the neo-Kantians. They heartily acknowledge and support the criticism of the conventional syllogism, so far as it claims to represent adequately all possible types of inference. But candor forces them to apply the same criticism to the doctrines of many of the opponents of this so-called traditional view. In other words, many critics of the syllogism simply point to its inadequacies as a universal technique of reasoning. But, as intimated above, the ideal of these thinkers is to substitute a more adequate technique for the rejected one. Empiricists and formalists alike persist in the search instituted by Bacon and Descartes, respectively, for a sure and easy method of reaching truth. Symbolic logic on the one hand, and the tenacious persistence of the doctrines associated with Mill's canons on the other, are two manifestations of what is at bottom one and the same tendency. In his *Implication and Linear Inference* Bosanquet demonstrates this point very clearly. But surely, so the modern logician would contend, it is necessary to question this whole notion of a mechanical technique, operating by means of rules fixed once and for all. He would argue indeed that this is to endeavor to preserve the empty formalism of the Aristotelian tradition, rather than its spirit. In other words, as the modern logician sees it, contemporary logic must effect a concrete synthesis of the formalistic and empirical doctrines. Merely to combine them, in the fashion proposed by Professor Montague or Mr. Johnson, while an open confession of the urgent need of supplementing various inadequacies in each of these one-sided developments, is in effect never to raise the most vital question of all—

may be said indeed to be a most effective way of entirely disregarding it.

This problem, namely that of analyzing the structure and articulation of our actually existing knowledge, together with its correlate, that of examining at first hand the process by which it is being developed, becomes unavoidable in the long run, for Kant and Hegel as it was for the Greeks, and now again for us as it was for Kant and Hegel. And while it is certainly true that our solution of it is bound to differ from theirs, in many essential respects, yet the spirit and the ultimate goal of the inquiry remain everlastingly the same. The goal has always been, as Plato might say, a justification of the ways of mind to man.

In the words of Bradley, who perhaps as well as any one succintly summarizes this standpoint in logic, "logic's direct and primary purpose is . . . to set out the general essence and the main types of inference and judgment [the categories], and, with regard to each of these, to explain its nature and special merits and defects. The measure here to be applied is the idea of perfect truth in the sense . . . [of systematic coherence]. Truth is reality taken as ideal, and that must mean reality taken as an intelligible system; and every judgment and inference therefore must be understood as directed and aimed at such reality. The degree in which the various types each succeed and fail in reaching their common end, gives to each of them its respective place and rank in the whole body."[14]

Abandoning as an artificial and one-sided abstraction the "linear" conception of inference,[15] modern logic insists that both induction and deduction are actual ingredients of every concrete process of inference, and are not, as is often

[14] *Principles of Logic*, second edition, p. 620. *Cf.* also F. J. E. Woodbridge, "The Field of Logic," in *Congress of Arts and Sciences*, St. Louis, 1904, Vol. I, pp. 313-330.

[15] The word, of course, is Bosanquet's. *Cf.* his *Implication and Linear Inference.*

uncritically assumed, separate and independent methods of reasoning. It is true, of course, that in the successive stages of the development of knowledge now the one, now the other aspect of thinking may assume temporary ascendency, and it is probably also true—as Poincaré somewhere observes—that some minds have a natural preference one way or the other. These historical and psychological considerations would at least partially explain the persistence of the conflict between formalists and empiricists, and might also serve as an added stimulus to various special investigations, from the standpoint of modern logic. Perhaps the most pressing demands in this regard are for a detailed analysis of scientific inference conducted in the light of the genesis and historical development of leading scientific conceptions,[16] and for such a study as that projected by the late Professor Creighton on the significance of history and the historical method.

In conclusion it may be pardonable to add one further personal observation regarding the relation of logic to metaphysics. For it is a frequently repeated objection, accompanied by a tone of reproach, that modern logic finally merges with, or is inseparable from, a metaphysics. But surely this is inevitable, in the end, on any view; just as inevitable, we may say, but no more so, than in the case of ethics, or of theory of values in general. And a frank admission of this fact claims our enthusiastic support. For, negatively, such a view solves the vexed "problem of epistemology," so-called, by revealing its unreality; while, positively, it establishes a definite foundation, critically aware of its own presuppositions, for a rational interpretation of human experience.

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[16] More especially, the nature and presuppositions of mathematical reasoning should be investigated. *Cf.* the present writer's preliminary study, *The Philosophical Presuppositions of Mathematical Logic.* New York, Longmans, Green & Co, 1925.

VALUE THEORY AND AESTHETICS

THE category of value is in a sense as old as philosophy, but in another sense the realm of values is new to exploration. During the last quarter century all the resources of psychological and logical analysis have been brought to the solution of problems of the relation of value to existence and reality, problems which if not new in their essence are new in their manner of formulation. The causes that led to the gradual shifting of the philosophical center of gravity from being to value need not be recounted here—to enumerate them would be to tell the story of the philosophy of the last decades. Enough that, in the words of Münsterberg, "through the world of things shimmered first weakly, and then ever more clearly, the world of values." This realm of values is "there" to quote a recent writer. It is the sense in which it is there which constitutes the key problem of our epoch.

The beginning of the serious discussion of value in this country is connected by many writers with the appearance of Münsterberg's *Eternal Values* and Urban's *Valuation*, both having appeared before the English speaking public in the same week. And indeed it may be conveniently dated from the appearance of a special *Value* number of the *Psychological Bulletin* in October, 1909, in which these two trends in value theory were brought into sharp contrast. A review of *Valuation* and an article by Münsterberg on "The Opponents of Eternal Values," defending his own position, served to set in clear relief problems which

were to determine the direction of discussion. In the meantime had appeared a new point of view and a new idiom (I refer to the pragmatic use of the value concept inaugurated by William James in the Lowell lectures), which served at the same time to make value a popular word and to introduce an approach to the problem which was to influence greatly the direction of thought on the question, at least in this country. The phenomenological, the axiological and the pragmatic points of view represented the three chief currents of value theory.

II

The application of all the resources of psychology, analytic and genetic, to the value problem, was the natural result of a period in which the psychological-biological point of view was uppermost. The first and most important condition, both of the origin and development of ideas and judgments of value lies obviously in human desires and feelings, and ultimately in the impulses, instincts and tendencies which they presuppose. Every assertion of value it is immediately evident, is dependent upon the experiences of the affective-volitional life. The answer to the question, what goes on in consciousness when we value anything, seemed to offer the clue, not only to the nature, but also to the validity of the values themselves. An answer to the question of genealogy—how values came into being seemed to offer the clue not only to the question of what our human values are, but also to the evaluation of these values. These problems of the phenomenology of values were in fact set specifically by the investigations of the Austrian value philosophers. The thesis of Meinong (involving essentially questions of analysis) that value is feeling, but the content of feeling only when it is mediated by judgments or assumptions, not only gave the impetus to

numerous psychological studies, but served to raise the entire question of the relation of valuation to cognition. The second thesis, that of Ehrenfels, that value is desirability, and that this quality is to be determined by reference to underlying biological dispositions gave impetus to a method which was essentially genetic and evolutionary in character, and which, in its turn, served to set the problem of the relation of genesis to validity and value. Urban's *Valuation* may be described as an attempt to unite these two points of view in one phenomenological method.

During this period of value discussion a special department of "Values" in the *Psychological Bulletin* and a special rubric in the *Psychological Index* indicated the status of the subject, and the inclusion of values as a special field of psychology by James Ward in his monumental *Principles of Psychology* served to give the new subject a certain standing. The outcome of the studies of this period, although not without permanent and valuable results, was, nevertheless, in the main, to transfer the problem from the psychological to the logical and philosophical domain. The reasons for this lie partly in the history of psychology itself. The development of the purely biological conception of the mind with its extremes of "Behaviorism," led naturally to the dropping of the value problem. If, as a certain wit has said, Psychology first lost its soul, then its mind, and finally consciousness, it must by that very fact, lose values. But there was another and deeper reason. The enthusiastic studies of the psychology of values were really based on the assumption that if we knew what goes on in consciousness when we value we should know what value is; if we knew how values "came into existence," we should also be in a position to determine their nature and validity. The psychological-biological foundation of values appeared therefore to be not only the most natural, but also the primary, and one might say of absolute significance. The

gradual recognition of the insufficiency of this foundation —not the least on the part of most of those who had inaugurated the study of values, gave rise to what may be described as the *Axiological* point of view, of which the recognition that value is a logically primitive concept that can be neither defined nor validated in terms of anything else, was the determining character. The essential *petitio principii* of the psycho-biological point of view is the first axiom of these later developments.

III

As all the resources of psychology had been brought into the service of the value problem, so now all the resources of logic and philosophy. This second stage in the development of value thinking in America may also be conveniently dated—from a meeting of the American Philosophical Association in December, 1915, at which the topic "Value and Existence," set by the Association itself, was vigorously debated. That the discussion itself did not take us very far, was the feeling of many of the members of the Association, but its real fruits were to be gathered in a series of articles which owed their origin largely to the stimulus of this meeting.[1] By this time fructifying germs of thought had come both from the neo-Kantian value philosophers in Germany and from the New Realists in England, who went at the problem from the logical and epistemological rather than the psychological point of view. The writings of Mr. G. E. Moore and Mr. Bertrand Russell, with their doctrine of the logically primitive character of value, and the investigations of the axiologists, Windelband and Rickert, with their discussions of the relation

[1] Prominent among these were: R. B. Perry, "The Definition of Value," *Journal of Philosophy*, Vol. XI; W. H. Sheldon, "The Empirical Definition of Value," *ibid.*; W. M. Urban, "Value and Existence," *ibid.*, Vol. XIII.

of value to validity, served both to broaden and deepen our thinking on values.

One thing appeared clearly from the very first. The value concept was showing itself to be of extraordinary significance, not only in the technical discussions of the philosophers, but also in the more popular and semi-popular writings of the period. Only by use of the new idiom, popularized largely by the pragmatists, did it seem possible both to focus and to formulate the real problems which were forcing themselves upon the reflective consciousness of the time—the problems namely of the place or fate of values in a world as it was conceived by evolutionary naturalism. But it was also clear that this extensive popular use was made possible largely, if not wholly, by the vague and equivocal character of the term. A considerable portion of the effort of this period was, accordingly, devoted to the problem of definition.

Space will not allow me to consider the confusions of this period and the heroic efforts to clear up these confusions—the six different meanings of value distinguished by Dewey;[2] the "equivocation" in value pointed out by Pepper, and his distinction between immediate and standard values,[3] or the distinction between immediate and contributory made by Picard.[4] Of this phase, I will merely say that although to some such discussions seemed to lose themselves in arid controversy and unmeaning refinement of distinctions, this does not really represent their general import. Clarification came at many points: all these studies were of value and have resulted, not only in significant distinctions in terminology, but also in bringing to light

[2] "Valuation and Experimental Knowledge," in *The Philosophical Review*, Vol. XXXI, p. 333.

[3] "The Equivocation of Value," Berkeley, *University of California Publications in Philosophy*, Vol. 4, p. 107.

[4] "Value and Worth," in *Journal of Philosophy*, Vol. IX, No. 18, and "Values, Immediate and Contributory." *Cf.* also, R. B. Perry, "The Definition of Value," in *Journal of Philosophy*, Vol. XI; and W. M. Urban, "Value and Existence," *ibid.*, Vol. XI.

UMI

the implications and ultimate intentions of value thinking. I shall confine myself, however, to those points in definition which have finally become determinative of ultimate issues.

The lines have gradually formed on three main issues. There is the issue with regard to extension, between those who take the narrower view, confining the concept of value to the a-logical notions of the good, the useful and the beautiful and those who take a broader view, including in the concept the logical values of existence and truth. As regards intention the issues are more complicated, between those, in the first place, who define value as the relation between an object and the interest of a sentient subject, and those who define it in terms of relations not necessarily psychical; and secondly, between those for whom value is definable in terms of some relation and those for whom it is ultimately indefinable, either because it is a unique quality or some non-existent form of objectivity.

These differences have far-reaching implications and are determinative of ultimate philosophical positions. It is, however, from the last distinction that the maximum consequences flow. Those who say that ultimate values, i. e., the good, the beautiful, and the true, are ultimately indefinable mean by this that they are individual concepts and that their nature can not be apprehended by such general propositions as form the material of natural science. There is no higher genus to ascribe them, as species, and no simples into which they may, as complexes, be analyzed. All of which means that value is not reducible to non-value terms.

The category of "value," it must be admitted, like certain other fundamental notions (including existence itself) seems to be one of those things about which we know well enough, so long as we are not asked what it is. The idea that definition is always "stipulated," would of course.

make it allowable to take any one of these current meanings of value provided only that we use it consistently throughout our discourse. But the problem is not so simple as this. The problem of definition is not merely a question of verbal definition, of avoiding ambiguity. It has been much more the question how value, as understood by the modern philosophical consciousness, is to be conceived whether it is to be subsumed under categories of being, such as quality or relation or whether it is itself a unique category not reducible to non-value terms. It is the fact that all the metaphysical and epistemological questions of value are already predetermined by our definitions that has made the problem of definition so important.

IV

That which more than anything else, perhaps, raised the problem of value to its significant and determining role in the thinking of the present is the question of the relation of value to cognition. The thesis of Meinong, that value is the content of feeling only when feeling is mediated by judgments or assumptions, implies that valuation at least involves cognition, even if it is not itself cognitional. The contention of the axiologists, on the other hand, that cognition itself always involves evaluation or the acknowledgement of the value of truth, implies that in this act of acknowledgement is involved a knowledge of value. On either view, the relation of valuation to cognition is very close and the determination of this relation has been from the start in a sense diagnostic of theories of value.

Now I think it is fair to say that the very emphasis from the beginning on values as contrasted with facts involved the vague but implicit assumption that some element of cognition of "reality" is involved in valuation. When for instance it is said that "the values are there" whatever

"science" or naturalism may say of the world, it is assumed that they are entities objects to be known in some way. This immediately raises the question of cognition of value and with it the question of a distinctive value judgment, or of a noetic character to feeling.

The idea of "valuation as a logical process," asserted by the pragmatists (Dewey and Stuart), involves the notion of value as judgmental—"immediate appreciations being not values in the strict sense of the word." Judgments of value are objective in their import in the same sense as are the factual judgments in which the conditions of action are presented. In structure and in function the judgment in which the outcome of this process (of valuation) is presented, is *knowledge* [italics mine] and objective in the only valid acceptance of that term."[5] For the axiologists also valuation is judgmental. Value is predicated of an object by means of the same verbal form as a quality is predicated, but there is a difference in the mode of predication not brought out by the verbal expression. When we predicate value of anything we pass from the mere concept of the essence of a thing, with its qualities, to a bearing which this essence has on existence. It is worth existing or ought to be. It is the acknowledgement of this "ought to be" or *Sollen* that constitutes the cognitive element in valuation. Finally, if value is an indefinable quale, analogous to sense data, as in the view of certain realists, there must also be for them a unique type of cognition of these essences, namely, a cognition through feeling and emotion. On this view, "appreciation" is itself noetic and "judgments" of value are truth judgments.

Without going into these differences, it may be said that the issue is clearly drawn between those who say in the above ways, that valuation is itself cognitional and those who say that while valuation involves cognition, it is itself

[5] H. W. Stuart: "Valuation as a Logical Process, an essay in *Studies in Logical Theory*, by John Dewey and other writers, p. 323.

not cognitional. Those who take the latter position may argue with Perry,[6] that interest (feeling and desire) creates values, but does not and can not cognize them; or, with Sellars, that valuing is always an operation supplementary to knowing and has no part in the knowledge process.[7] In either case, the position follows, it is clear from the relational definition of value and the conception of value as a subjective *addendum* to reality. There is knowledge about value, but no knowledge of value. On the other hand, it is, perhaps, equally inevitable that those who hold that value is ultimately an indefinable quale or "objective" should also hold that it is the object of a unique form of knowledge, whether the knowledge process be emotional and intuitive or judgmental. Any discussion of the details of this debate is wholly beyond the province of this paper. Enough for our purpose to point out the great divide in modern philosophical thinking that results from the two different answers to this problem. The issue thus clearly drawn, like that involved in the definition of value, cuts deep. It is the question whether values are entities, objects, or objectives to be apprehended or known—whether there is knowledge of value, or merely knowledge about certain relations to which we have given the name values. The values are "there," *are* in some sense, but the sense in which they are is largely bound up with this question of cognition. If valuation is not cognitional of reality in some sense, they remain simply a subjective *addendum* to reality. If valuation is cognitional thus the values cognized are constituent elements of the world.

Even more fundamental than this question of the cognitional character of valuation, is the question as to whether cognition itself is essentially a valuational process. The saying of G. P. Adams, that "we miss the true inwardness of the epistemological problem itself unless we

[6] "The Definition of Value," in *Journal of Philosophy*, Vol. XI, p. 152.
[7] "Cognition and Valuation," in *The Philosophical Review*, Vol. XXXV.

realize that it is but part of the problem of values at large" expresses the matured convictions of a large number of those who have followed the value thinking of the last decades. It is the "value character of the theoretical" itself, the result of pragmatic and axiological developments in logic, which, more than anything else has served to give significance to the value problem. Deeper than any judgment, in the sense of merely bringing contents together in relations, there is, it is held, a "reflexive" act in which the judgment is claimed or acknowledged to be true or false. This act is essentially valuational in character, the point at issue between pragmatist and axiologist being mainly whether the values are relative or absolute.

The relation of cognition to valuation remains one of the unsettled problems of value theory. Yet it may be said without prejudice, I think, that the drift of opinion is towards what we may describe as the axiological point of view. That valuation has something of the noetic in it is probably the conviction of the majority of those that think about these questions. That the noetic has something of the nature of valuation in it, that significant judgments of existence and truth can not be made without acknowledgement of values, is perhaps the conviction of an equal number. However this may be, it is generally recognized that on the solution of this perplexing question —the relation of the "normative" to the "factual" turns the entire problem of the metaphysical status of values.

V

With regard to this metaphysical question—of value and reality—our discussions have, as might be expected, reflected all the tendencies current in present-day philosophies. Indeed all the main divisions reappeared in the universe of value discourse. It is precisely the great signifi-

cance of value philosophy, as I view it—that it has forced all these philosophies to declare themselves on ultimate issues and to make themselves intelligible. From this point of view, three main types of value theory may be distinguished: the Idealist tendency, the Realist tendency, and the Pragmatic tendency.[8]

Of the two tendencies represented in the value number of the *Bulletin,* Münsterberg had said that they are complementary, that they completely supplement each other, representing the two fundamental aspects under which value can be studied. It is the position of Pragmatism, however, that both of these positions, the psychological or phenomenological and the axiological, represent a vicious abstractionism. The one fixes its eyes on the consciousness of value, the other on the objects of value, but neither has its eye on the value situation. The result is a cross-eyed effect instead of clear vision.[9] For the pragmatist, it is not fair to ask whether values are subjective and relative to human feeling, or objectively real. They are both. When the social nature of valuation is considered, the alternative between objectivity and relativity to human feeling is unsound. "As the outcome of the process of valuation is knowledge and objective in the only valid acceptation of that term, so the realms of fact and value are both real, but that of value is logically prior and so the more real."

Whatever may be said of Pragmatism's approach to values and its handling of the problem (I am not concerned here with evaluation) the fact remains that the significant issues continue to be between realistic and idealistic theories of value. Perhaps the same "instability of pragmatism" of which Perry speaks makes itself felt here also.

[8] *Cf.* David W. Prall: "The Present Status of the Theory of Value," *University of California Publications in Philosophy,* Vol. 4.

[9] *Cf.* Herbert W. Schneider, "The Theory of Values," in *Journal of Philosophy,* Vol. XIV.

Such at least in my own belief.[10] In any case, the pragmatic solution of the problem of value and existence has not proved satisfactory and the real debate continues to be between the idealists and the realists.

In general, the most significant feature of the last decades has been the preoccupation with values combined with the revival of realism, and what the new realisms make of values is perhaps their most serious test. As regards value, there is no agreement among contemporary realists. There are those who, like Perry, hold the view that value is a psychological character which the object acquires only by a relation to the liking or disliking of a sentient subject. There are others who regard value as an indefinable quality which attaches to existences in the same sense that natural qualities such as red attach to their objects. Others, again (Santayana), hold that value attaches to essences rather than to either physical or psychical existence. Values are immediately objective, but to mistake them for existences is to suffer illusion. To enjoy them one must appreciate them without imputing existence to them.

Despite these marked disagreements, all realists are one in being realistic in a popular and important sense. All reject the axiological point of view, that value is in any sense an ultimate character or condition of existence. The differences among the realists are significant, especially on the question of the relation of valuation to cognition, but all agree that value, whether a psychical character or a non-mental essence, in in some sense an *addendum* to existence.[11]

[10] See my paper on "The Pragmatic Theory of Value: A Reply to Herbert W. Schneider," in *Journal of Philosophy*, Vol. XIV; *cf.* also Mr. Schneider's rejoinder in the same number.

[11] Statements of the realistic position may be found in Perry's different articles; *cf.* also J. F. Dashiel: *The Philosophical Status of Values*, New York, 1913.

Like the realists, the idealists also disagree on many points. One of the more important differences turns on the question of the relation of value to personality. Are values independent of persons or do they exist only in and for persons? There are those who like Leighton, hold that while "the problem of values is pre-eminently the problem of philosophy," this means merely that "the fundamental philosophical problem is that of the mind's valuing, purposing attitude-taking in knowing, contemplating, doing, worshipping in the course of reality and that we do not evade metaphysics or issue in a new era of thought, by talking about values in the abstract, rather than valuing selves."[12] Others hold that values are over-individual and over-personal and that if values are dependent upon mind, they are dependent only in the sense that truth and existence themselves may be said to be thus conditioned.

Yet here again, despite these differences, all are idealists in the important sense that value is an ultimate character or condition of existence. All agree that it is not a mere *addendum* to existence but part of the nature of the perceptual, the aesthetic or the historical object. This view may be based on the assumption that reality of any kind arises from an act of mind and that, since mind is essentially purposive, or directed to the good or value, reality, as the creation of mind, will necessarily be the embodiment of value. But it may also be based on something much more fundamental, on the axiom, namely, that "to separate value and reality is essentially contradictory." This axiom of idealistic metaphysics, however expressed, whether in the terms of Bonsanquet's identification of totality or individuality and value (that the clue to both reality and value is individuality and completeness) or in the more modest statement of the axiologists that while existence and value are not identical, they are inseparable (Windelband),

[12] J. A. Leighton, *Man and the Cosmos*, New York, 1922.

brings with it the belief that "the recognition that the giveness of objects and their existence involves valuation, is the first step towards a theory of values."[13]

VI

From the very start, one of the chief motives of the philosophies of value was to work out the relations of the various values, economic, ethical, aesthetic, logical and religious and ultimately to construct a system of values. In the words of Münsterberg, "a mere belief in values and a preaching of them does not suffice. With a mere transvaluation of values little is accomplished until the deepest essence of valuation is revealed. What is lacking in our modern philosophy is a closed system of values."

The idea of a system of values is, however, ambiguous and for the same reasons that the term value itself is ambiguous. Whether value be taken in the narrower or broader sense, in its relative or absolute meaning, determines our conception and principle of system.

What are the values of life and how are they to be classified? How may we determine what is the most valuable end of human living, i. e., what is the standard, the scale of values? In answer to these questions books on ethics have been rewritten from the value point of view and beginning with Ehrenfels' *System der Werttheorie,* systems of values have been constructed. The basis of classification here becomes human needs and desires and the system is inevitably constructed from the genetic psycho-biological point of view. One may proceed purely empirically (for instance by the questionaire method) and find out what men actually do value and an actual scale of values. Or one may follow the genetic method and in showing how

[13] For a statement and critique of idealistic views, including those of Münsterberg, Bosanquet and Urban, see G. P. Conger: "Some Idealistic Evaluations of Values," in *The Journal of Philosophy,* Vol. 20.

as evolution runs its course, there emerge certain adaptations which we call values and as mental evolution supervenes upon physical evolution there emerge on the reflective level of mind certain tertiary qualities, ideals of goodness, beauty, truth, etc., also by that very fact determine not only the nature of values but a system or scale of values.[14]

But this point of view, it is increasingly recognized, inevitably involves the *petitio principii* inherent in the entire psycho-biological point of view. We wish to validate these values by carrying them back to life. But in this it is already assumed that life and its continuance have value. For if these values get their significance solely from their teleological relation to life and its enhancement, surely life must get its significance from absolute values which it embodies. Otherwise life and its relative values lose all genuine meaning. From the more ultimate philosophical point of view, then, an ultimate knowledge of value is presupposed in any concept of valuable life. From this point of view the idea of a system of values has another meaning, just as the idea of value itself has another meaning.

This line of argument—made familiar by the axiologists, inevitably brings with it the idea of philosophy as a system of absolutely valid values. In this conception of a system of values the fundamental problem is obviously the relation of these values, the true, the good and the beautiful to each other; as well as the special question of the relation of the logical values of existence and truth to the a-logical values. The chief problem here, we may say, without going into details, is that of *co-ordination* or *subordination.* If values are unique, individual and indefinable, it seems to follow that they can not be reduced to each other and un-

[14] Typical of this point of view and method is an article by W. K. Wright: "The Origin of Values from Instincts," in *Philosophical Review,* Vol. XXIV, No. 2. Constructions of such systems on a large scale are to be found in J. M. Baldwin's *Genetic Theory of Reality,* and S. Alexander's, *Space, Time, and Deity.*

derstood in terms of each other, and many, including Münsterberg and Croce, have drawn that inference: they are co-ordinate. On the other hand, subordination or the principle of scale seems to follow from the *a priori* nature of value. For it seems to lie in the very nature of values as such that given any two values one must be higher than the other. The principle of scale is the principle of subordination.

These statements serve merely to present the problem of the system of values. The problem itself is still unsolved. It must be admitted that as yet a completed scale of values does not lie open to our knowledge. It is true also that all attempts to reduce or subordinate one type of value to another have proved unsatisfactory. On the other hand, it seems equally certain that the principle of scale, of higher and lower, lies in the very nature of value itself, is intrinsic to the value concept, and that the principle of subordination must be ultimately determinative in any system of values. It is true that if we take the principle of totality or individuality as the clue to both reality and value, it is possible, in the manner of certain idealists, to reduce the principle of scale to the principle of logical system and make degrees of value correspond to degrees of totality or self-completeness. On this view a certain conciliation of the two principles is possible. But such a solution has seemed to many at least, to sacrifice all other values to logical values and against this sacrifice the modern value consciousness protests. In any case no completely satisfactory principle of system has yet been found.[15]

[15] Contributions to the discussion of this problem are found chiefly in other than American writings. The principle of co-ordination is, however, upheld in Münsterberg's *Eternal Values;* the principle of subordination, in articles by A. P. Brogan and W. M. Urban. See the former's paper, "The Fundamental Value Universal," in *Journal of Philosophy,* Vol. XVI; also W. M. Urban: "Knowledge of Value and the Value Judgment, *ibid.,* Vol. XIII. An interesting presentation of this problem and an evaluation of the contributions of Windelband and Rickert are to be found in a monograph by William Ray Dennes: "The Method and Presuppositions of Group Psychology," *University of California Publications,* Vol. V, No. 1.

VII

It is at this point perhaps, that the development of our recent thinking on aesthetics may be most intelligibly considered. In general books on aesthetics have been mostly written by those who are desirous of applying modern psychology to the problem of art and those written by philosophers from the standpoint of a theory of the universe. But there is a third point of view making itself felt, namely that which considers aesthetics as a fundamental and irreducible form of valuation and as having a unique place in a scheme of values.

Space will permit me to consider the problem only from this latter point of view. The doctrine of the autonomy of the aesthetic values, developed in their several ways by both Croce and Münsterberg, has penetrated deeply into both the general and the specifically philosophical consciousness of the time. The nature of aesthetic value in general and the question of its autonomy specifically are among the most difficult questions of value theory.

The difficulties, as well as the confusions in this field may be seen in the fact that views as to the nature of the aesthetic range all the way from a denial of its character as value at all, to the view that all value is aesthetic. Aesthetic value is in general not recognized by the pragmatist, for whom valuation is judgmental. On the whole, the aesthetic experience would appear to be essentially post-judgmental and appreciative and on the principles of the pragmatic position, as an immediate appreciation, it has no logical function and must be denied the name of value."[16] For Prall, on the other hand (and for Santayana from whom this conception derives) valuation is immediate enjoyment" and value an essence. "Valuation is not a logi-

[16] *Cf.* H. W. Stuart: "Valuation as a Logical Process," an essay in *Studies in Logical Theory*, by John Dewey and other writers.

cal process" and "standard value is a misnomer." All values are in a sense immediate and aesthetic.[17]

Such wide variation as this indicates, not only the equivocations in value but also the uncertainty in our interpretations and evaluations of the aesthetic. So far as the last question is concerned, we can merely say that neither extreme represents the consensus of thought on this question. The ancient view that values are subsumable under the heads of goodness, beauty and truth, "a three-fold cord not lightly broken," may in general be said to be strengthened rather than weakened by modern value theory. All attempts to reduce the aesthetic either to truth or goodness leave a remainder. But it is equally certain that every attempt to break the three-fold cord results in highly unreal and sophisticated notions both of the aesthetic itself and of the other values of truth and goodness from which it has been separated. The idea that aesthetic objects constitute a world of "valuable illusion," that to enjoy them one must appreciate them without imputing reality to them, associated with the doctrine of the autonomy of the aesthetic, marks the point at which the aesthetic problem becomes crucial, not only for value theory but ultimately for metaphysics itself.

VIII

Value thinking has not only played a determining role in those disciplines traditionally known as normative, it has not only been a fruitful motive in the contemporary reconstructions of traditional idealism and realism, but has also changed notably the perspective in which books on Ethics and "Introductions to Philosophy" have been written.

[17] *Cf.* D. W. Prall: "Metaphysics and Value," Berkeley, *University of California Publications*, Vol. 5; also "A Study in the Theory of Value," *ibid.*, No. 13.

Noteworthy efforts to utilize the results of value theory in ethics are Everett's *Moral Values* and Dresser's *Ethics in Theory and Application*. Both not only make use of the distinctive terminology of value theory, but attempt the construction of a scale or system of values. In a concluding chapter on "Ultimate Values," Dresser discusses the relation of value to reality. As regards Introductions to Philosophy, Bridgman discusses values in connection with the problem of universals.[18] Patrick makes the problem of values central throughout.[19] Conger has a section on "Philosophies of Value" which he uses as a transition from the "normative sciences" to the philosophy of religion.[20] Calkins in the last edition of *Persistent Problems of Philosophy*, rewrites the chapter on "Contemporary Philosophy," chiefly from the point of view of changes brought about by value theory and the "axiologists." Her conclusion is that "axiology is consistent with any metaphysics except that of realistic naturalism."

In short, as has been said, "one would have to call a fairly complete roll of contemporary philosophers to exhaust the list of students of axiology." All this means that the traditional problems of philosophy have received a noteworthy revitalization and reinterpretation through the value concept and value thinking in general. It may be an exaggeration to say with Mr. Belford Bax, that "in the last resort all problems of metaphysics reduce themselves to problems of value," but it is certainly true that none of these problems is soluble without reference to value. In any case there can be no question that there has developed in modern thought a new point of view which has reached such a point of definiteness and consolidation as to receive a new name, that of Axiology.

[18] *An Introduction to Philosophy*, New York, 1925.
[19] *An Introduction to Philosophy.*
[20] *A Course in Philosophy*, New York, 1924. See also G. A. Wilson: *The Self and Its World*, New York, 1926.

It is ordinarily assumed that when a body of knowledge has attained sufficient integrity to be given a new name, it has at least a relative self-sufficiency. There are those indeed who, like Creighton, see no independent problem here. In a sense they are right. The questions we have been considering are questions that must be raised by any philosophy and in the attempt to answer them appear, as we have seen, all the differences of the schools. On the other hand, it may be said with equal truth that the almost simultaneous creation, on the part of so many of the new term, axiology, in contrast to epistemology was motivated by nothing less than an acute realization of the existence of problems that could not be adequately handled within the limits and with the methods of the old field.

Axiology may be merely a name for value theory in general. It may also mean a specific point of view regarding the ultimate problems of philosophy. In the latter sense the recognition of the axiological problem registers a relatively new situation. It epitomizes problems in a sense unique in the history of thought. What we have here is in fact a general and deep-seated conflict or rivalry in modern thought between the tendency to subject values to the scientific or logical consciousness and the tendency to submit science and logic to the demands of a more general evaluational consciousness. The insistence on the axiological point of view, like the insistence on the value judgment, as opposed to the judgment of fact, represents this latter tendency and reflects this deep-seated dualism in the modern consciousness. As we look back over the development of value thinking, including the struggle over definition, the dispute over the relation of valuation to cognition, the question of the subjectivity and objectivity of values, we can see that this has been the fundamental issue.

What is the significance, the implication of this fundamental issue? Underneath the entire development may be

discerned a pressing problem of the modern consciousness. The paradoxical combination of a growing preoccupation with values with a marked revival of realistic naturalism has created a new situation. There are those who feel the need of a transfer, so to speak, of values from their traditional "idealistic" basis to what they feel to be "the more solid foundation of realism and naturalism." The question is, can this transfer be made without relegating the values in general, and religious values in particular, to a realm of aesthetic imagination or fruitful illusion? There are those, on the other hand, who dwell on the uniqueness of the values of truth, beauty and goodness, declare them to be indefinable and irreducible, in this way not only removing them from the purview of science, but also claiming for them a validity superior to that of science. The question here is whether, if we follow this line of thought, we can say anything intelligible about values at all, for only that is a fact that is expressible in logical form, and where we have logical form we have "science" in some sense. The problem of values in modern thinking has raised the whole question of the definition and evaluation of science.

This chasm in modern thought is not closed and shows no signs of closing. It is all very well for the naturalistic thinker to say that "there is no doubt of the supreme importance of values for life, but this importance does not exempt them from the attempt to understand them, to make a science of them." But every one is aware that to make a "science" of them in this sense is to reduce them to non-value terms and that the mere assertion of their supreme importance begs the whole question of the relation of importance to reality. It is all very well for the idealistic philosopher to say that value is the clue to reality, and that "if the objectivity of value is denied no religious view of the world is possible." But here, again, everyone knows that this in-

volves making the evaluational consciousness ultimate and the reduction of existence itself (and the sciences of the existent) to a form of value and validity.

This chasm, I repeat, is not closed and shows no sign of closing. It is possible to say with Sheldon that both types of reduction, of value to existence, and of existence to value are equally possible and equally valid, and that it is simply a question of choice, according to their fruitfulness, which reduction we take.[21] Such a dualism can not, however, be ultimately satisfactory, and we are always confronted with the incontrovertible fact that fruitfulness is itself a value concept. The primacy of value seems inescapable whatever turn or twist of thought we take. Perhaps the best we can say (alike the most and the least) is that, while not identical, value and existence are inseparable. For some, as for Windelband, this is the "sacred mystery" that will never be solved. And it is perhaps the realization of this fact that constitutes the revival of mysticism so characteristic a feature of the last decade. In any case, this is the key question of modern thought.

For the modern man the values are *there,* not only pragmatically, so to speak, but in a new and more acute sense than ever, for theory also. It is the *sense* in which they are there which has been, and continues to be, the great problem of the world.[22]

WILBUR M. URBAN.

HANOVER, N. H.

[21] W. H. Sheldon: *Strife of Systems and Productive Duality,* Cambridge, 1918, Ch. VI.

[22] These last paragraphs were written before the meeting of the Sixth International Congress of Philosophy. I can not resist the temptation to record the conviction that this chasm in modern thought does show signs of closing. The unanimity of representatives of all schools of thought, on the general position, that value and fact, or existence, are inseparable, was the outstanding feature of the discussions of the Section on Value. In general, the effect of the discussion was to suggest that there is, perhaps, no field in modern philosophy in which there is so much convergence of opinion towards agreement on fundamentals, and no field in which the discussion of technical problems has more clearly and definitely led to a deeper understanding of the problems that face the philosophy of the modern world.

ETHICS AND SOCIAL PHILOSOPHY

ETHICAL thought in English-speaking countries has been strongly affected for the past few years by two influences. One is the general concern over the application of ethical principles to problems of social and political organization which was a natural consequence of the war. The other is the recent dramatic swing of psychology away from the analysis and description of mental processes to an experimental study of behavior, in whose motivation and control ethics is profoundly interested. So powerful, indeed have been these two influences in English-speaking countries that the ethical theory of the present period is less interested in the rational grounds of moral judgment than in the interaction of the human individual with his natural and social environment. As a consequence, the boundaries betwen ethics and sociology, politics and economics seem not as well-defined and certainly are not as well-observed as formerly; much present-day thought on these subjects proceeds on the assumption that the philosophy of practice is fundamentally one field within which ethical, social, political, and economic theory represent merely differences of interest and emphasis.

The war has not simply directed attention to pressing problems of political and economic organization; it has led, at least in the countries now under consideration, to a widespread movement away from idealism in ethics and in political and social theory. This has been due in part to the

belief prevalent in the war period that Hegelian idealism supplied a theoretical justification for the excesses of German nationalism, and in part to the spiritual exhaustion and disillusion of the post-war years. The first of these causes is responsible for Professor Hobhouse's spirited attack upon the idealism of Hegel and "his most modern and faithful exponent," Bosanquet, in his *Metaphysical Theory of the State*.[1] While this keen and vigorous critique is concerned primarily with political relations, it is like all its author's writings in the social field founded upon definite ethical principles. The three governing positions in the Bosanquet theory as Hobhouse finds them, (1) that we are morally free when our actions conform to our real will; (2) that our real will is the general will, and (3) that the general will is embodied in the State, he challenges, rejects as false, and denounces as socially dangerous. The human self he holds to be positively free when, hindered by no external influences, it develops the different parts of its nature harmoniously. But the will to effect such harmonious development (the *rational* will as Hobhouse prefers to call it) is not real in the average man nor completely real in the best of men. It exists only as a rational ideal in sharp opposition to our actual impulses which alone can claim really to exist. This rational will, furthermore, is in no proper sense a general or common will, nor does its expression require that the nature of the individual be shaped by, or merged in, the common mind, but rather that all minds be given a free scope for individual development. And finally it is an equally glaring error to regard the State with all its imperfections, injustices and stupidities as the embodiment of the interests of all its members as rationally harmonized.

Absolute idealism is not left without worthy defenders in the ethical field, however. Professor Turner[2] has essayed

[1] London, George Allen and Unwin, Ltd., 1918.
[2] *The Philosophic Basis of Moral Obligation*: London, Macmillan Co., 1924.

a restatement of the ethical implications of this philosophy in a book notable for clarity of sustained argument in the higher altitudes of philosophic thought. A truly philosophic ethics, he maintains as his central contention, must base itself upon pure obligation, but an obligation which proves itself perfectly consistent with rationality. Individual and social development is more and more freely directed toward the attainment of objective value which consists in completeness or perfection. The ultimate standard of completeness and of objective value is the dynamic process of the universe as a whole. In his selection of values the human individual remains entirely free. Nevertheless obligation remains as the characteristic feature of morality. It is an imperative to apply the principle of *pure* reason to reason in its practical connections and entanglements. The distinctive law of pure reason is that of organization which commands the inclusion of the part within the whole. For Reason declares the highest value to reside in the fullest measure of contribution to the maintenance and development of the Whole; and when we realize explicitly the true nature of the Whole then there is at once implied an inexpugnable element of absolute obligation.

Of the powerful influence of psychology upon the ethics of our day Professor McDougall's *Social Psychology* must still be regarded as the most important single source, considered both as the starting-point of the author's own further studies of political and ethical problems and as the target of criticism and attack by others. The full force of McDougall's well-known dictum that the instincts furnish the sole motive-force of human conduct is apparent when coupled with his further assertion[3] that all moral judgments spring originally from moral emotions. And inasmuch as there are no specific moral emotions, judgments of moral approval merely express and reflect the feelings

[3] In agreement with the conclusion reached by Westermarck in his *The Origin and Development of Moral Ideas.*

which accompany the arousal of certain primary instincts, and disapproval those which attend upon the arousal of others (perhaps more definitely grouped) like hostility and fear and aversion. Thus the first result of the impact of psychology upon ethics seemed revolutionary enough: reason was dethroned and the place of command given to impulse and emotion. But McDougall weakened the force of this blow by assigning to intelligence a crucially important function in moral and social control. In virtue of its powers of intellectual synthesis it forms conceptions which appeal to a number of instincts and enlist the support of their combined motive-force. Such is the conception of the self-as-subject-to-social-criticism which as the nucleus of the "self-regarding sentiment" is supported by instinctive fear, self-assertion, submission, and active sympathy in conventional morality. McDougall moves a step further toward idealism in his account of how through reflection and the influence of admirable example the individual forms abstract moral sentiments of honor, justice, generosity, etc., and finally attains to the master-sentiment for a perfected moral life, but always and even here as a self-playing-to-social-gallery and therefore moved by such impulses as self-display, submission, sympathy and the like.

More consistent with his starting-point and the tendencies of his thought as a whole is the explanation which McDougall offers in his *Group Mind*[4] of the way in which the self-regarding sentiment expands into national sentiment and becomes the psychological basis of political organization. Nationalism, or patriotism, as thus constituted, is the most powerful moralizing and socializing agency known to man, not even excepting religious humanitarianism. This is because the nation is the one group which the individual, through the efficacy of language, literature and historic tradition, can and does identify with

[4] Cambridge, Cambridge University Press, 1921.

himself. It therefore enlists in its support those strong egoistic instincts which respond to any thought of self-interest and reinforces them by powerful altruistic impulses. The greater instinctive appeal of nationalism over humanitarian ethics McDougall rationalizes[5] (shall we say?) by endeavoring to show that universalistic ethics is in many respects inferior to nationalistic and if consistently followed would be destructive of civilization.

The view that we find in the instinctive-emotional responses of the human species the ultimate source of all moral distinctions was promptly challenged by believers in the rational basis of morality. Canon Rashdall, whose death has been a grievous and irreparable loss to ethics, vigorously attacked McDougall's position[6] from the standpoint of that ethical idealism which he so masterfully expounds in his *Theories of Good and Evil*. As a psychological explanation of the way in which certain kinds of conduct came first to be approved and disapproved he admitted a great deal of truth in McDougall's account. But he contended, the objective validity claimed by moral judgments which constitutes the very heart of our reflective morality is left wholly unexplained. All scientific thinking is based upon certain ultimate principles which cannot be induced from experience but which are implied in all our thinking. The ultimate principles of morality are as much implied in our thinking about conduct as are the ultimate axioms of mathematics in our thinking about quality and number. We claim for the judgment "This is good" the same kind of truth that is claimed for mathematical or scientific or historical judgments. Furthermore, when reason judges an act to be right, reason itself furnishes the motive for performing it, and this is moral obligation. Here we touch

[5] In his *Ethics and Some Modern World Problems*: New York, G. P. Putnam's Sons, 1925.

[6] *Cf. Is Conscience an Emotion?* Also an article in *The Hibbert Journal*, Vol. 19, pp. 449ff.

upon the crux of the controversy; the idealist holds that the idea of duty does indeed create an impulse to do what Reason pronounces ought to be done.

The objective validity of the moral judgment is upheld by Dr. G. E. Moore whose *Principia Ethica* appeared in a second edition in 1922 and exerts a considerable influence upon contemporary ethical thought. Moore's theory is notable because it represents rationalism or intellectualism in ethics divorced from idealistic metaphysics. To be good is not identical, the author asserts, with being willed or being felt in a particular way. Frequently, we do prefer what we think good but it by no means follows that what we think when we think a thing good *is* that we prefer it. Good is a simple, unanalyzable, indefinable, quality, as simple and indefinable as "yellow." Judgments of intrinsic moral value which attribute this quality to objects (if true at all) are true universally. Moralists have made the mistake of trying to define goodness by identifying it with something else, e. g., pleasure, or super-sensible reality, while the proper aim of ethics is to discover what other properties belong to all things which are good. This is equivalent to asking what kinds of things are good in themselves. Moore's answer to this question is that intrinsic or unmixed goods consist in the love of beautiful things or of good persons; esthetic enjoyment and personal affection possess intrinsically the quality of goodness.

The rationalistic school finds it easier to exhibit the inadequacy of "psychologism" in ethics than to answer the questions which it raises. For the concern of ethics is with human behavior, and human behavior has its psycho-physical antecedents—such factors as hereditary action-tendencies and environmental pressures, such processes as trial and error, and habituation, leading to "substitute stimuli" and "substitute responses"—which psychology is rapidly bringing to light. Such psycho-physical antecedents deter-

mine, or at least influence, the motivation of all conduct, including that which is consciously directed toward the realization of the Good. The need for a fuller explanation of the motivation of good conduct is doubtless responsible for a pronounced tendency among thinkers otherwise inclined to do full justice to reason to admit feeling to a place of equal importance in morality. For is not feeling the dynamic of action? And not merely that, does it not also exercise a selective function among prospective modes of behavior? Thus Mr. A. K. Rogers[7] holds that a thing is recognized as possessing goodness when the contemplation of it affords pleasure, in which case it calls forth the judgment of approval. The pleasure of approval is a sign of the attractiveness of a desire in an intellectual or anticipatory setting, a sign that we are on the right road to a satisfaction of our needs. The peculiarity of the sense of ought this writer finds in the feeling of repugnance or dislike aroused in us against something for which we have otherwise an active craving. Against what do we experience this emotional revolt? Against what is cruel and ugly, certainly. But more profoundly, against what is mean and small and essentially trivial. Accepting essential triviality as the mark of the morally bad, we ask why such triviality is morally offensive to us. The answer is, because of its *unreality*. An unreal act is an act which has no firm footing in our rational nature: contrariwise, acts have reality when they issue from a consistent and dependable personal character.

Professor G. C. Field[8] is pre-occupied with the same difficulty of accounting for the motivation of good conduct. Kant's theory he rejects because, after separating the good from all our actual wants, Kant is forced to assume that its mere intellectual apprehension is sufficient to move us to action, while as a matter of fact the bare knowledge of

[7] *The Theory of Ethics*: New York, Macmillan Co., 1922.

anything can never move us to action. Aristotle's doctrine of the mean he also subjects to a similar criticism. If the Good consists in the harmonious development of all the different tendencies of our nature we have still to find a *desire for the good* which is not merely a sum but a harmony of these different desires and impulses. The Good must consist in some form of self-activity on the part of conscious intelligent beings (there is this much truth in the Aristotelian ideal of contemplation) but it must also make effective connection with our practical activities. The ideal situation which meets both of these requirements is the relationship of love among conscious beings which involves perfect knowledge and understanding. With reference to the conflicting claims of reason and feeling to determine the moral judgment, Field emphasizes a difference between the subject-matter of the moral judgment and that of our "scientific" judgments. In the former case, we are judging about the actions and characters of ourselves and human beings like ourselves. And such being the case, it is not unreasonable to take a certain feeling of ours toward such forms of conduct as an indication that they are so related to our nature that they would be an element in what we desired above all else if we had full knowledge and understanding.

Perhaps the most satisfactory synthesis of these two apparently discrepant factors of reason and will, on the one hand, and impulse and emotion, on the other, is attained by Professor L. T. Hobhouse,[8] whose wide knowledge of the facts of mental and moral development and excellent powers of philosophical correlation enable him to deal very competently with a problem like this. All behavior, human as well as animal, has, he holds, its natural roots in hereditary instinct or impulse. Feeling is a mode of consciousness whose biological function is the governance of impulse

[8] *Moral Theory*: London, Methnen and Co., 1921.
[9] *The Rational Good*: London, George Allen and Unwin, Ltd., 1922.

in the interest originally of survival and later of that continuity and harmony of conscious life which reason demands. When impulse is directed by an anticipatory idea attended by a feeling, desire arises. Now any element in experience (impulse, idea or action, of ourselves or others) which excites a favorable or pleasant feeling tending to intensify, prolong, or renew it, is judged to be good. Conversely, any experience which excites an unfavorable feeling which tends to arrest or annul it, is judged bad. Hence, we may say that any experience immediately pleasurable arouses an impulsive judgment of approval which expresses the accompanying feeling. But this may be corrected by a maturer judgment of rational reflection which considers the experience in its wider relations. This also rests on feeling, however, the feeling which an act or situation arouses when connected with other acts and experiences. Since reason is the principle of inter-connection persistently applied, it correlates purposes in an operative system which postulates, (1) the harmony of all feelings in one system; (2) the harmony of all experience of all sentient beings with this body of feeling, and (3) the consistent and impartial application of the universal principles of practical organization to the world of sentient existence. But what of the obligation we feel to conform with the demands of rational goodness? On the view here taken, every judgment of the good involves the existence of an impulse-feeling directed toward it. Among the mass of impulses we must recognize a certain correlation which we can speak of as a specific impulse toward harmony by virtue of whose influence our various impulses tend to become an organized body, overcoming recalcitrant movements, however intensely felt, by the power of the organized mass. This organization, consistently and intelligently carried through is the practical reason. While the work of the practical reason is essentially creative it rests upon a real fact, a

certain unity pervading all mind. But the unity which it finds differs from the unity it seeks to create because of the obstacles which still exist to free and harmonious co-operation between men, such as physical barriers and opposing aims and interests.

In all these discussions of the relation of feeling and impulse to reason one factor has been omitted: *action,* in the sense of bodily movement. Instinct and impulse while aroused by an object perceived or thought of and involving a feeling toward this object is, primarily, a conative tendency seeking expression in bodily movement. Now such motor response has distinctive features of greatest importance for ethics. It is of the nature of thought to generalize, to range over a wide field, including the past and future as well as the present and to claim universal validity for its conclusions. And feeling, while it attaches originally to particular objects which stir impulses and awaken desires readily spreads to the general conceptions of thought. But action always has a specific occasion; motor responses are events occurring in the physical world and, like all physical events, they have their particular time and place. Behaviorism has in recent years been forcing upon our notice this objective expression, this external embodiment, of mind in motor activities.

It is the importance of action that Professor Dewey[10] emphasizes. Since in his view the primary function of thought is the guidance of behavior and action always occurs at a particular time and place, he holds that thought is peculiarly and properly concerned with specific practical problems. The doctrine of instrumentalism has of course a direct bearing upon ethics. The field of conduct is the field of action, and action is (in one aspect, at least) a motor response projected into the physical world and fol-

[10] *Reconstruction in Philosophy*: New York, Henry Holt and Co., 1920; *Human Nature and Conduct*: New York, Henry Holt and Co., 1922; *Experience and Nature*: Chicago, The Open Court Publishing Co., 1925.

lowed by a chain of physical events. This concentration on the part of pragmatists upon behavior has led to one result of highest significance for ethics. It has brought into the foreground one feature of action hitherto neglected but of great ethical moment, its *experimental* character.

As living individuals and social beings we have, according to Dewey, many diverse interests and desires. We seek to satisfy them through activities which social custom has made habitual. But these desires and impulses frequently come into conflict and the habitual activities employed in their service block one another. Such conflict of mutually incompatible goods defines a moral situation. The work of intelligence applying itself to the practical problem is to resolve the situation by analyzing out the component factors, tracing in imagination the consequences of alternative courses of possible behavior, and finally projecting a provisional plan of action that promises to effect such a reorganization of the activities involved in the existing situation as will enable them all to function with the maximum of freedom and harmony. But in carrying out its plan in action intelligence proceeds experimentally, i. e., subject to control by the consequences not altogether foreseeable which eventuate as the action proceeds, and stands ever ready to revise its plan in the light of new facts and unexpected conditions which are thus brought to light.

Thus, reason, according to Dewey, does not create or foreordain that harmony of interests and desires which constitutes the rational good. At the most it discovers this harmony in and through the active commerce which it directs between the individual and his environment; it brings to light new resources of satisfaction in the natural and social conditions of human existence. Inasmuch, moreover, as the moral end or ideal is essentially and necessarily a plan of action, its realization does not come as the far-off terminus of protracted effort; it is achieved in the course

of action which, so far as it proceeds harmoniously, brings with it an emotional appreciation of varied and mutually enhancing contacts with the natural world and with fellowmen. From these two facts a consequence follows which Dewey regards as of momentous importance to morality and, in fact, to the whole field of human practice. The deep gulf generally believed to exist between values as intrinsic and ideal on the one hand and instrumental and utilitarian on the other is completely bridged over. In the light of a true functional psychology morals can no longer be exalted as the sphere of purely personal relationships governed by *a priori* rational law while industry and commerce are depreciated as the field of technical art and mechanical invention concerned with the material necessities of human existence. Rather are both morality and industry practical arts, making progress so far as human intelligence is able by the use of its own proper methods of experimental enquiry and technical invention so to control and to transform the physical and social conditions of human life as to increase and diversify and harmonize the satisfactions which accompany the daily activities of men.

The doctrine of pragmatism has had a marked influence upon the political and social philosophy of our day. This is in a measure due to the incisive writings of Professor Dewey who is keenly interested in politics and internationalism, and profoundly convinced of the value of the instrumentalist logic as applied to these problems. Professor Laski,[11] for instance, adopts pragmatism as a philosophic basis for his attack upon the absolutist theory of the state and of national sovereignty. "What the Absolute is to metaphysics," he says, "that is the State to political theory." Tested by the pragmatic criterion, absolutism and monism in political theory have consequences which are morally dangerous and may be tragic, as the late war so

[11] *Sovereignty.*

conclusively demonstrated. From the theoretical conception of the Oneness of the State we pass to its absolute legal right and then to its absolute moral right. In the face of such unqualified national power, individuals abdicate their right of independent moral judgment and accept the dictates of the sovereign state as right whether their own consciences pronounce them right or wrong. The pluralistic theory of the state, on the contrary, is consistently experimentalist. It denies the rightness of force; it insists that the state like every other association shall prove itself by what it achieves. Sovereignty, therefore, in the case of the state as of all other organizations, means no more than the ability to secure assent on the basis of the useful services it renders to human individuals.[12]

Two recent books by Mr. Walter Lippman on public opinion[13] may also be cited in further illustration of the effect of instrumentalism upon present-day thought in the social-political field. Mr. Lippman believes that the hope to which democracy has pinned its faith of developing among the mass of its citizens by social education an opinion upon matters of public concern sufficiently well-informed and judicious to guide the direction of national policies is an unattainable and mistaken ideal. It is, of course, not difficult for a writer of Mr. Lippman's exceptional opportunities for observation and facility at characterization to find evidence striking enough of the incompetence of public opinion in modern democracies. But he believes that scientific justification for his thesis that an intelligent public opinion is an impossibility is furnished by the pragmatist principle that intelligence works effectively only when applied to the specific situations that arise in the lives of human individuals. Thus the average citizen thinks intelligently, can think intelligently, only of his own

[12] Professor Norman Wilde defends the authority of the state on the basis of an idealism that may be described as Ethical rather than Absolute. *Cf. The Ethical Basis of the State.*

business, his own profession, his own local and family interests. Affairs of government can be competently considered only by insiders who "know the ropes." Hence, all the citizen-body can expect or hope to do is by application of certain coarse but clear criteria to keep tab on the insiders and repel the efforts of special interests to control the processes of government for their own profit.

Moving still further "to the left" we may give passing notice to writers who make more radical use of recent discoveries in psychology and physiology in their treatment of social and moral problems. Thus, Mr. Joad,[14] who celebrates the complete failure of traditional ethics because of its metaphysical method of *a priori* reasoning and proposes to write an empirical or "common-sense" ethics, makes large use of the psychology of instinct with which he couples many of the facts and assumptions of psycho-analysis. "Impulse" he holds is the dynamic element in human life, the principle of growth and progress. It is an urge to action springing from the depths of our nature and conditioned by no consciousness of end or result. Some impulses, to be sure, develop into conscious desires and purposes; but impulse is primary and it rather than desire is to be looked on as the source of human conduct and the social order. The importance and rightfulness of impulse are witnessed by the facts which psycho-analysis has unearthed regarding the evil effects of thwarting or repressing these vital tendencies. Morality itself springs from an impulse, the impulse to blame. Man feels this impulse, then sets his reason to work to rationalize the censure he wants to inflict. Historically morality has to a great extent signified the control of the impulses of the young by those of their elders which has meant the control of our positive creative impulses by the negative impulses of fear

[13] *Public Opinion*: New York, Harcourt Brace and Co., 1922; *The Phantom Public*: Harcourt Brace and Co., 1925.
[14] *Common-sense Ethics*: New York, E. P. Dutton & Co.

and blame. Thus in the matter of sex relations, morality has taken the form of prudery, "the old woman's caricature of morality." Mr. Joad's doctrine of the "liberation of impulse" sounds like a recommendation to let ourselves go, and indeed, the burden of his teaching does seem to be to give expression to the life-force in the gratification of impulses, particularly while they retain their youthful fire and vigor. But he is at pains to deny that his theory justifies any indiscriminate indulgence of impulses. There is, he holds, an impulse in human nature which may be called *will* which seeks the fullest possible satisfaction of impulse as a whole and hence the best life. Furthermore, impulses fall into two classes, possessive and creative, of which the latter bring the fuller satisfaction because they facilitate the expression of other impulses and tend to create a social order offering more opportunities for satisfaction to all.

Finally we are interested to see what behaviorism as sheer physiology can yield in the way of ethical theory. To rebuke any possible incredulity on this point it will be sufficient to mention the ethics of Professor Givler.[15] The meaning of all terms, he tells us, consists in the action-patterns they arouse in us. Logical antonyms arouse antagonistic reactions. So "good" signifies an outgoing extensor reaction and "bad" a withdrawing or flexor reaction. Hence the virtuous man is the relaxed, resilient, coordinate individual and the vicious either the muscularly flabby or abnormally hypertonic organism. Virtue means the mobilizing or expending of energy to obtain a dependable good. As to what is dependably good, the author seems to regard some form of energism as the logical implicate of behaviorism. Extensor actions, he tells us, bring more of the world of action within our range and even the thwarted man imaginatively explores the environment to find substitute stimuli to release his energy upon. And only when

[15] *The Ethics of Hercules.*

a man's actions really enlarge his environment and provide him with increased opportunities for turning his wishes into wills is he in the highest sense ethically free.

A far cry it is indeed from goodness as the unique property of a will which is governed by pure reason to goodness as the characteristic of a motor reaction governed by extensor rather than flexor muscles. Yet such is the range and diversity of contemporary ethical theory. Despite this confusing divergence of viewpoint and conclusion (due in part to the disintegrating impact of new knowledge and world-shaking events) there are clear signs that progress is being made in solving the problems of human conduct in the moral and social field. Whatever the outcome may be of the present controversy among psychologists over instinct, the recent studies of instinct and emotion initiated by McDougall have thrown a flood of light upon the motivation of human behavior, and have given us a more adequate and concrete conception of the way in which man's practical reason obtains and extends its control over his conduct, as is witnessed by Hobhouse's synoptic and clarifying treatment. Dr. Moore has rendered ethics a signal service by showing that the objectivity of moral values can be successfully defended without appeal to any special metaphysical theory. And Professor Dewey, by demonstrating the experimental character of all intelligently-directed behavior, has brought to our attention a neglected factor of incalculable importance to moral and social science.

We make no real progress, I believe, in understanding the facts of morality if we do not recognize that the organization of human conduct and social relations is achieved under the direction of rational will as the one practical capacity common to all men which can claim universal and objective validity for its conclusions and its dictates. But this does not mean that the good life can be completely understood as an *a priori* prescription of reason, or that ethi-

cal enquiry can properly limit itself to a study of the logical inter-relations of moral judgments. On the contrary, reason's plans for the reorganization of human conduct can only be worked out by courageous, sagacious experimentation whose procedure and results are as much determined by the external occasions and conditions of human action, physical, physiological and social, as by the dictates of reason. Moral progress, as we all know, means the realization of ideals formulated and approved by rational reflection through the instrumentality of activities of the human organism in interaction with the forces and factors of the physical and social environment. This means that two very different spheres, each with its own distinct characteristics, that of intellectual synthesis and intelligent interpretation on the one hand, and that of bodily movement and physical change on the other, be brought into effective working relation. And here of course is the rub, the crucial difficulty of practical philosophy revived in our day by the rise of behavioristic psychology and reappearing as that of the relation of conscious intelligence to the motor responses of the human organism.

New knowledge of the working impulse and feeling has contributed materially to the solving of the problem. But we do also, I think, get decided help from a consideration of the outstanding position occupied by three motor responses in the behavior of man as an intelligent and social being. These three responses, depending upon structures peculiar to man are those of articulate speech, of manual contrivance and technical invention, and emotional expression and esthetic perception. These three responses owe their outstanding importance to the fact that while they are bodily movements occurring in the physical world they are nevertheless to a remarkable degree under the control of individual intelligence, and while they are developed and exercised under social guidance and confirmation they

are at the same time especially fitted to express what is unique and original in individuality. In virtue of these characteristics the responses mentioned become, as I have shown in a recent book,[16] media for the communication and expansion of intelligible meanings and satisfactions. Through speech, ideas, beliefs and opinions are exchanged, accumulated and correlated; through practical contrivance, industrial methods and appliances, social procedures and institutions are invented and put to social uses; through emotional expression with esthetic perception, meanings strongly felt but inarticulate are embodied in, and transmitted through, sense-imagery. These three activities are the basis of human association because through them men are able to participate in a common experience: to share in a common fund of knowledge, to co-operate in a common world-task, and to respond sympathetically to the salient features of our common human lot. Through these activities carried on in connection with the everyday activities of social life, men realize values, viz., those of true insight and mutual understanding, of fellowship in productive labor, and of imaginative sympathy, which are *objective* inasmuch as they are open to verification by all who make the specialized motor responses required for their realization. The accumulated products of these activities, scientific and historical writings, industrial art and social institutions, and creations of fine art in all its branches, constituting the sum-total of social culture, furnish the individual with a means of translating the facts of his life into terms of universal human experience and also with a set of generally accepted symbols in which to embody his own insights, inventions and appreciations, and thus to make them part of the permanent spiritual heritage of humanity.

WINNIPEG, CANADA. HENRY W. WRIGHT.

[16] *The Moral Standards of Democracy*: New York, D. Appleton & Co., 1925.

HUME AND THE CONTEMPORARY THEORY OF INSTINCT

THE impression which the first chapter of McDougall's *Social Psychology* conveys to a reader is that something new in psychology has been discovered and formulated. According to McDougall, psychology is of unique importance for all the social sciences; and it is just this which in the past has been overlooked. Attempts to develop the social sciences have rested upon "vaguely conceived principles" or else upon "fragmentary and misleading psychological assumptions." Attention was almost exclusively paid to "the cognitive or intellectual processes" to the neglect of "the life of emotion and the play of motives." The method employed was that of introspection, which is best suited to the consideration of the former but least so to that of the latter. One prevailing assumption was that "reasonable action is normal and natural to man." Such a view, according to McDougall, is due to a misunderstanding of the basis of human nature; and the only thing that can remove it is "a full and accurate account of those most fundamental elements of our constitution, the innate tendencies to thought and action that constitute the native basis of the mind."[1]

Such a study must be "an evolutionary natural history of the mind."[2] That method was pointed out by Darwin who, though suffering from an undue deference to the prevailing psychological doctrine of hedonism, was yet the first to enunciate "the true doctrine of human motives."[3]

[1] *Social Psychology*, Chap. 1. The references throughout are to the 13th ed.
[2] *Ibid.*, p. 15.
[3] *Op. cit.*, p. 14.

The development of the science of biology and the work of Darwin were necessary before "a comparative and evolutionary psychology" could provide the needed basis for the social sciences.[4] "The continuity of the human mind with animal evolution as regards all bodily characters" had first to be established; and the way had to be prepared for the recognition of the "similar continuity of man's mental evolution with that of the animal world."[5] Accordingly, "it would be difficult to find any adequate mention of instincts in treatises on human psychology written before the middle of last century. But the work of Darwin and of Herbert Spencer has lifted to some extent the veil of mystery from the instincts of animals, and has made the problem of the relation of instinct to human intelligence and conduct one of the most widely discussed in recent years."[6]

McDougall's condemnation of philosophers and writers on ethics and the social sciences is severe; and it may be worth while just to devote some consideration to the claims which McDougall puts forth on behalf of his own psychology. There is no doubt that most students of McDougall believe that he has enunciated not merely important but *new* doctrines. It is necessary to remember that though one or two or even a number of instances can be cited where philosophers and social writers have held doctrines opposed by McDougall and defective, as he holds them to be, yet all philosophers may not be open to the charge. McDougall, in his somewhat general and vague condemnation, may himself be "hasty, incomplete, and misleading"; and it is due, in fairness to philosophers in general and to some philosophers in particular, to consider the question, In what respect is this psychology new?

The theory of one writer and philosopher especially stands out as being relevant to this question. That person

[4] *Ibid.*, p. 5.
[5] *Ibid.*, p. 5.
[6] *Ibid.*, p. 22.

is Hume. Hume has been known and studied, and has exercised a tremendous influence. But his name is connected particularly with the theory of knowledge. His theory of the "Passions" has, it is to be feared, received less attention. Yet that theory is applied by him in his treatment of Morals and in his treatment of History and of Art. What this article will, therefore, attempt to show is that Hume's theory is, in the main points, very similar to the contemporary theory of instinct. It may differ in its terminology and in the detailed treatment of the emotional life; but such differences are found between even contemporary theories. The references to Hume will be mostly taken from the *Enquiry.* Hume himself says, in the advertisement to the *Enquiry,* that "most of the principles, and reasonings, contained in this volume, were published in a work in three volumes, called a *Treatise of Human Nature"; and* Green and Grose in their Preface to their edition of Hume's works say: "Anyone who will be at pains to read the *Inquiries* alongside of the original *Treatise* will find that their only essential difference from it is in the way of omission. They consist in the main of excerpts from the *Treatise,* rewritten in a lighter style, and with the more difficult parts of it left out." But another result of the omissions requires to be noted. Omission involves selection, and gives a clue to what Hume was inclined to emphasize. In the *Enquiry,* in contrast to the *Treatise,* a doctrine of instinct seems to be more strongly emphasized and to stand out more prominently; and for this reason the *Enquiry* is most frequently referred to in the present article.

The contemporary theory of instinct maintains that there are primary innate tendencies at the basis of the human mind; and that, though these may vary relatively in strength between individuals of different races and be "favoured or checked in very different social circumstances

of men in different stages of culture," yet they "are probably common to the men of every race and of every age." "If this view, that human nature has everywhere and at all times this common native foundation, can be established, it will afford a much-needed basis for speculation on the history of the development of human societies and human institutions. For so long as it is possible to assume, as has often been done, that these innate tendencies of the human mind have varied greatly from age to age and from race to race, all such speculation is founded on quicksand and we cannot hope to reach views of a reasonable degree of certainty."[7]

Hume, too, argues for the doctrine of the uniformity and constancy of human nature. "It is universally acknowledged, that there is a great uniformity among the actions of men, in all ages and nations, and that human nature remains still the same, in its principles and operations. . . . Mankind are so much the same, in all times and places, that history informs us of nothing new or strange in this particular. Its chief use is only to discover the constant and universal principles of human nature, by showing men in all varieties of circumstances and situations, and of furnishing us with materials, from which we may inform our observations, and become acquainted with the regular springs of human action and behavior. . . . But were there no uniformity in human actions, and were every experiment, which we could form of this kind, irregular and anomalous, it were impossible to collect any general observations concerning mankind; and no experience, however accurately digested by reflection, would ever serve to any purpose. . . . What would become of *history*, had we not a dependence on the veracity of the historian, according to the experience, which we have had of mankind?" What would become of *criticism?* Where would be the founda-

[7] *Op. cit.*, pp. 19-20.

tion of *morals?* How could *politics* be a science?[8] Consequently, Hume seeks to show that "in the production and conduct of the passions, there is a certain regular mechanism, which is susceptible of as accurate a disquisition, as the laws of motion, optics, hydrostatics, or any part of natural philosophy."[9]

What Hume and McDougall alike seek to establish is the same—namely, a uniform and constant basis in human nature. And this is held to be necessary because without such uniformity there could be no social science. It might seem at first that there was a difference in the attitude of the two, that Hume regards history as merely a psychological study, as material for establishing psychological principles; while McDougall considers that a social psychology must first be established in order that history may be studied and laws of social organization discovered. But if McDougall's contention is accepted, that "the instinctive impulses determine the ends of all activities" and "are the mental forces that maintain and shape all the life of individuals and societies,"[10] it seems that Hume's view of history must be accepted. History is merely a study of a material that reveals the constant basis of human nature.

What about the method whereby this doctrine of the constancy and uniformity of human nature is to be established? It is true that Hume had not the advantage of the Darwinian evolutionary theory; but he is credited by historians of philosophy with the definite introduction of the natural history method. This method is deliberately applied in the treatment of Religion, when he seeks to trace Religion to its basis and argues for the view that it is not primary or original but secondary in human nature. Religion "springs not from an original instinct."[11] Polytheism

[8] *Enquiry Concerning the Human Understanding*, Sec. viii, Pt. I.
[9] *Dissertation on the Passions*, Sec. VI.
[10] McDougall, *Op. cit.*, p. 44.
[11] *Natural History of Religion*, Intro.

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is the primary form of religion; and the first ideas of religion arose "from a concern with regard to the events of life, and from the incessant hopes and fears, which actuate the human mind."[12] Such factors are "the anxious care for happiness, the dread of future misery, the terrory of death. the thirst of revenge, the appetite for food and other necessaries."[13] This treatment of Religion is very closely allied to that given by McDougall. The latter like Hume seeks to assign Religion to its basis in human nature; and both consider the religions of primitive men. According to McDougall, the wonder of primitive man" was especially aroused by those things and events which excited also his fear, by disease and death, pestilence and famine, storm and flood, lightning and thunder, and the powerful beasts of prey. . . . Therefore he walked in fear and trembling."[14]

Hume thus seems alive to the comparative and natural history method. It is not true that he confines himself to a narrow conception of psychology and psychological method; though he has recourse to human experience in the first place to discover the nature of emotional life; but any theory must admit that the first clues to conduct are to be found in man's own experience. McDougall lays stress upon the past tendency to consider psychology merely as a study of cognition, and insists that it must claim to be "the positive science of the mind in all its aspects and modes of functioning."[15] He also holds that, with certain qualifications, the aim of psychology may be taken to be that of rendering our knowledge of human nature more exact and more systematic.[16] According to Hume, moral philosophy is "the science of human nature"; and he points out that man may be considered as an active being, as requiring to regulate his conduct, or as a reasonable being,

[12] *Ibid.*, Sec. II.
[13] *Ibid.*, Sec. II.
[14] McDougall, *Op. cit.*, pp. 304-305.
[15] *Ibid.*, p. 15.
[16] *An Outline of Psychology*, p. 1.

that is, as capable of gaining information about his own nature, about the principles which "regulate the understanding, excite our sentiments, and make us approve or blame any particular object, action, or behavior."[17] He views man as a "reasonable being," that is, as having a cognitive function; man as a social being; and man as an active being.[18]

Hume's conception of history as simply providing material for a discovery of the "regular springs of human action and behavior" is a recognition of "objective methods" and the acceptance of something more than the "pure psychology" of introspective description. The study of the differences of manners in different ages and countries shows what factors serve to obscure the uniformity of the human mind. Observation of variations in an individual's conduct at different ages provides for conclusions regarding the change of "sentiments and inclinations" which takes place according to the age of human creatures. Human behavior and conduct are thus studied by Hume in order to establish the psychological principles of human nature.[19]

But he links up human psychology with the nature of animals. He does not draw a sharp line of demarcation between men and animals. After pointing out the considerable use made of *Analogy* in all human "reasonings," he maintains that "these analogical observations may be carried farther, even to this science, of which we are now treating; and any theory, by which we explain the operations of the understanding, or the origin and connection of the passions in man, will acquire additional authority, if we find that the same theory is requisite to explain the same phenomena in all other animals."[20] That "experimental reasoning" on which the whole conduct of life depends, is

[17] *Enquiry Concerning the Human Understanding*, Sec. I.
[18] *Ibid.*
[19] *Enquiry Concerning the Human Understanding*, Sec. VIII, Pt. I.
[20] *Ibid.*, Sec. IX.

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possessed by man in common with the lower animals. By "experimental reasoning" Hume means to all intents and purposes a learning by experience, the determination of present conduct by past experience. It is not reasoning in a theoretical or speculative sense. Neither philosophers, children, nor the generality of men are guided in conduct by such theoretical or abstract reasoning. But "were this doubtful with regard to men, it seems to admit of no doubt with regard to the brute creation; and the conclusion being once firmly established in the one, we have a strong presumption, from the rules of analogy, that it ought to be universally admitted, without any exception or reserve."[21]

It is not necessary to show or to argue here that Hume did give a full analysis of animal behavior. It is only necessary to point out that he saw the relatedness of the animals and mankind at a time prior to the formulation of the Darwinian theory. He saw the need of checking his theory of human nature by a consideration of animal nature. Here he uses analogy; but that is what McDougall does;[22] and it is what must be done by any psychological observer. He does not draw between man and the animals the distinction, to which McDougall takes exception, that "animals are guided by Instinct and man by Reason."[23]

It is well-known to students of the history of philosophy that Hume argues that at the basis of all knowledge there is a non-rational factor. Knowledge rests upon a foundation which can find no justification either in pure reason alone or from experience. McDougall criticizes philosophers on the ground that they falsely assumed that men always normally act reasonably and make clever calculations about pleasure and pain and holds that the minds of such philosophers entertaining such "curious views" were

[21] *Op. cit.*
[22] *Social Psychology*, p. 28. *Outline of Psychology*, p. 129.
[23] *Outline of Psychology*, p. 129.

"either constitutionally devoid of the powerful impulses that so often move ordinary men to actions which they know to be morally wrong and against their true interests and destructive of their happiness, or so completely moralized by strict self-discipline that these powerful impulses are completely subordinated."[24] This criticism does not in the least apply to Hume, who was yet a philosopher and an eminent one.

Hume dethrones Reason from its sovereign position in knowledge; but he does so also in regard to conduct. "And these decisions, though really the result of our calm passions and propensities (for what else can pronounce any object eligible or the contrary?) are yet said, by a natural abuse of terms, to be the determinations of pure *reason* and reflection."[25] According to Hume, "men often act knowingly against their interest: It is not therefore the view of the greatest possible good which always influences them. Men often counteract a violent passion, in prosecution of their distant interests and designs: It is not, therefore, the present uneasiness alone, which determines them."[26] "Who sees not that vengeance, from the force alone of passion, may be so eagerly pursued, as to make us knowingly neglect every consideration of ease, interest, or safety; and, like some vindictive animals, infuse our very souls into the wounds we give an enemy?"[27] He maintains that "reason, in a strict sense, as meaning the judgment of truth and falsehood, can never of itself, be any motive to the will, and can have no influence but so far as it touches some passion or affection."[28] "The ultimate ends of human actions can never, in any case, be accounted for by *reason*, but recommend themselves entirely to the sen-

[24] *Social Psychology*, p. 10.
[25] *Principles of Morals*, Sec. VI, Pt. I.
[26] *Dissertation on the Passions*, Sec. V, 4.
[27] *Principles of Morals*, App. II.
[28] *Dissertation on the Passions*, Sec. V, 1.

timents and affections of mankind, without any dependence on the intellectual faculties."[29]

There is here in Hume no belief that reason is the determinant of human action. According to him what is usually called reason and what is so much recommended in moral discourses is "nothing but a general and calm passion."[30] It is Hume that enunciates the well-known doctrine that "reason is, and ought to be, the slave of the passions, and can never pretend to any other office than to serve and obey them."[31] The basis of human action is thus non-rational. Reason neither prompts the act nor does it set the end towards which the act tends. Ends, rather, are relative to the non-rational side of human nature. This view is paralleled by that of McDougall. "The instinctive impulses determine the ends of all activities and supply the driving power by which all mental activities are sustained; and all the complex intellectual apparatus of the most highly developed mind is but a means towards these ends, is but the instrument by which these impulses seek their satisfactions, while pleasure and pain do but serve to guide them in their choice of means."[32]

What, then, is the character of this non-rational basis of human nature and human conduct? If normally human beings are not guided by reasoning," nature must have provided some other principle, of more ready, and more general use and application; nor can an operation of such immense consequence in life, as that of inferring effects from causes, be trusted to the uncertain process of reasoning and argumentation."[33] Hume's analysis of knowledge and conduct leads him back to something which remains inexplicable to reason, to something which must, to use a more recent phrase, be accepted "with piety," to some-

[29] *Principles of Morals*, App. I, v.
[30] *Dissertation on the Passions*, Sec. V, 2.
[31] *Treatise*, Book II, Pt. III, Sec. III.
[32] *Social Psychology*, p. 44; *cf.* also pp. 379ff.
[33] *Enquiry*, Sec. IX.

thing which will provide "those, who delight in the discovery and contemplation of *final causes*" with an "ample subject to employ their wonder and admiration."[34]

Though Hume uses the term "nature" in this connection, yet he does not claim that he has thereby rendered an explanation of anything; he is merely directing attention to what must simply be recognized. But in speaking of nature in that way, he has the good company of McDougall. "For it would be strange indeed if Nature, after successfully evolving through many millions of years all the wonderful varieties of nicely adapted animal behavior on the principle of Instinct, had suddenly deserted this principle for another. . . . And such a reversal of policy by Mother Nature would seem the more strange, when we see how, even far down the scale of animal life, Intelligence co-operates so beautifully with Instinct."[35] "The pairing instinct of the female bird is provided by Nature with a lock which can be turned only by a key of one specific pattern; the male is provided by Nature with that key." "But Man, though he is Nature's most favored child, was not constructed by her upon any new principle. He is only one among her many marvels, though the greatest of them."[37] Let Hume now be heard. "It is more conformable to the ordinary wisdom of nature to secure so necessary an act of the mind by some instinct or mechanical tendency, which may be infallible in its operations, may discover itself at the first appearance of life and thought, and may be independent of all the labored deductions of the understanding."[38] So for Hume, too, "Nature" has made use of the principle of Instinct.

Hume, in stating his doctrine of knowledge, of the passions, and of morals, makes use of the term "instinct." All

[34] *Enquiry*, Sec. V, Pt. II.
[35] *Outline of Psychology*, p. 130.
[36] *Ibid.*, p. 98.
[37] *Ibid.*, p. 134.
[38] *Enquiry*, Sec. V, Pt. II.

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mental operations are reduced by him to "natural instincts." The belief, for instance, which is the essence of cause and effect, is "the necessary result of placing the mind in such circumstances. It is the operation of the soul, when we are so situated, so unavoidable as to feel the passion of love, when we receive benefits; or hatred, when we meet with injuries. All these operations are a species of natural instincts, which no reasoning or process of the mind and understanding is able, either to produce, or to prevent."[39] The belief that objects are independent, are real and have a continuous existence is an opinion which is embraced "by a kind of instinct or natural impulse, on account of its suitability and conformity to the mind"; it is not one which "we form after a calm and profound reflection."[40] In resorting to this term "natural instinct" Hume is aware that he is explaining nothing. When he uses the word "custom" in connection with the principle of cause and effect, he says, "we pretend not to have given the ultimate reason of such a propensity. We only point out a principle of human nature, which is universally acknowledged, and which is well-known by its effects." He goes on to state that this propensity is an "instinct" implanted by nature; it must be excited by nature, and "must arise from the particular situation, in which the mind is placed at any particular juncture."[41]

All this may at first seem somewhat remote from the modern theory of Instinct, and open to the objection of multiplying the number of instincts unnecessarily. So, too, may seem the view that reason itself is to be regarded as "nothing but a wonderful and unintelligible instinct in our souls."[42] But at this point it may be worth while to examine the two theories more closely. "In the typical

[39] *Enquiry*, Sec. V, Pt. I.
[40] *Treatise*, Bk. I, Pt. IV, Sec. II. *Cf. Enquiry*, Sec. XII, Pt. I.
[41] *Enquiry*, Sec. V, Pt. I and Pt. II.
[42] *Treatise*, Bk. I, Pt. III, Sec. XVI. *Cf. Enquiry*, Sec. IX.

case," says McDougall, summing up the significance of various instances of instinctive behavior,[43] "some sense-impression, or combination of sense-impressions, excites some perfectly definite behavior, some movement or train of movements which is the same in all individuals of the species and on all similar occasions; and in general the behavior so occasioned is of a kind either to promote the welfare of the individual or of the community to which he belongs, or to secure the perpetuation of the species." "Every instance of instinctive behavior involves a knowing of some thing or object, a feeling in regard to it, and a striving towards or away from that object."[44] Then finally the definition is given of an instinct as an inherited or innate psychophysical disposition which determines its possessor to perceive, and to pay attention to, objects of a certain class, to experience an emotional excitement of a particular quality upon perceiving such an object, and to act in regard to it in a particular manner, or at least, to experience an impulse to such action.[45]

Let us now turn to Hume. How does he understand Instinct? It has to be admitted that Hume gives no systematic account of Instinct; but yet a theory of Instinct underlies his other doctrines. This is seen, for instance, in his discussion of Justice. According to him, the object of Justice is property. What is exactly the relation between them? He raises the question whether there is an *instinct* of justice which has property as its end or natural goal. He denies that property is connected with any instinct. "Though it seems a very simple proposition to say, that nature, by an instinctive sentiment, distinguishes property, yet in reality we shall find, that there are required for that purpose ten thousand different instincts, and these employed about objects of the greatest intricacy and nicest

[43] *Social Psychology*, pp. 25-26.
[44] *Ibid.*, p. 26.
[45] *Ibid.*, p. 29.

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discernment. For when a definition of *property* is required, that relation is found to resolve itself into any possession acquired by occupation, by industry, by prescription, by inheritance, by contract, etc. Can we think, that nature, by an original instinct, instructs us in all these methods of acquisition?"[46] "All birds of the same species, in every age and country, build their nests alike: In this we see the force of instinct. Men, in different times and places, frame their houses differently: Here we see the influence of reason and custom. A like inference may be drawn from comparing the instinct of generation and the institution of property."[47] In this argument Hume is assuming that an instinct is characterized by a definite simple object, and by the presence of a simple, uniform, and constant relation between that object and a "passion." Justice, on the other hand, is a rule that regulates the complex passions of men, and is based on a recognition of what is useful in respect of the whole civil society.

In his treatment of the passions he introduces a distinction between the *causes* of a passion and the *object* of a passion. Speaking of Love and Hatred, for instance, he says, "In these two sets of passions, there is an obvious distinction to be made between the *object* of the passion and its *cause*."[48] "Self, which is the *object* of the passion, must still be related to that quality or circumstance, which *causes the passion*."[49] Speaking of Pride and Humility he says, "We must, therefore, make a distinction betwixt the cause and the object of these passions; betwixt that idea, which excites them, and that to which they direct their view, when excited."[50] His treatment of the passions is thus concerned with showing what circumstances, passions, and objects are uniformly found in experience to be

[46] *Principles of Morals*, Sec. III, Pt. II.
[47] *Ibid.*
[48] *Dissertation on Passions*, Sec. II, 2. *Cf. Treatise*, Bk. II, Pt. II, Sec. I.
[49] *Op. cit.*, Sec. II, 4.
[50] *Treatise*, Bk. II, Pt. I, Sec. II.

"conjoined." This is paralleled by the more modern treatment which resolves human action into a perception, an emotion, and a reaction towards an end or goal. Hume builds up his theory of Morals and of the passions, as well as his theory of knowledge, upon the argument that the mind "operates" in a perfectly definite way when placed in a definite situation or faced with definite circumstances, and that this "operation" is common or uniform in mankind and, to a certain extent, is common to man and animals.

The operation of the soul that is instinctive is "the necessary result of placing the mind in such circumstances." "When we are so situated" it is as "unavoidable as to feel the passion of love, when we receive benefits: or hatred, when we meet with injuries."[51] It "must arise from the particular situation, in which the mind is placed at any particular juncture."[52] "There are bodily wants or appetites, acknowledged by every one, which necessarily precede all sensual enjoyment, and carry us directly to seek possession of the object. . . . In the same manner, there are mental passions, by which we are impelled immediately to seek particular objects, such as fame, or power, or vengeance, without any regard to interest. . . . Nature must, by the internal frame and constitution of the mind, give an original propensity to fame. . . . In all these cases, there is a passion, which points immediately to the object."[53]

After making the distinction between the *cause* and the *object* of a passion, Hume proceeds to raise the question whether the cause and the object of passions are *natural* and *original.* The test of being natural is constancy, uniformity, or steadiness. For instance, as regards the *object* of pride and humility, he says, "these passions are determined to have self for their *object,* not only by a natural but also by an original property. No one can doubt but

[51] *Enquiry,* Sec. V, Pt. I.
[52] *Ibid.,* Pt. II.
[53] *Principles of Morals,* App. II.

this property is *natural* from the constancy and steadiness of its operations. 'Tis always self, which is the object of pride and humility. . . . That this proceeds from an *original* quality or primary impulse, will likewise appear evident, if we consider that 'tis the distinguishing characteristic of these passions. Unless nature had given some original qualities to the mind, it could never have any secondary ones; because in that case it would have no foundation for action, nor could ever begin to exert itself. Now these qualities, which we must consider as original, are such as are most inseparable from the soul, and can be resolved into no other."[54] As regards the cause of these passions, he holds that it is *natural.* The question "whether the *causes*, that produce the passion, be as *natural* as the object, to which it is directed," can be soon answered "if we cast our eye upon human nature, and consider that in all ages, the same objects still give rise to pride and humility. . . . But tho' the causes of pride and humility be plainly *natural,* we shall find upon examination, that they are not *original,* and that 'tis utterly impossible they shou'd each of them be adapted to these passions by a particular provision, and primary constitution of nature. 'Tis absurd, therefore, to imagine, that each of these was foreseen and provided for by nature, and that every new production of art, which causes pride or humility; instead of adapting itself to the passion by partaking of some general quality, that naturally operates on the mind; is itself the object of an original principle, which till then lay concealed in the soul, and is only by accident at last brought to light."[55]

For Hume, therefore, at the basis of human nature there are certain primary impulses, which are naturally and originally connected with a simple and definite "quality" as their cause, and with a definite object or goal. These primary impulses are comparatively few in number. " 'Tis

[54] *Treatise,* Bk. II, Pt. I, Sec. III.
[55] *Op. cit*

the sign of an unskilful naturalist to have recourse to a different quality, in order to explain every different operation." Where a multiplicity of things may act as causes of a passion, it is because "there are some one or more circumstances common to all of them, on which their efficacy depends."[56] It is this general quality which is originally and naturally connected with a passion. For Hume this conjunction of circumstances, a passion, and an object is ultimate. He simply assigns it to the "principles of the human frame" or to "nature," or to "the internal frame and constitution of the mind," or to "the particular fabric and constitution of the human species." This ultimate fact is what Hume understands as Instinct. "But though animals learn many parts of their knowledge from observation, there are also many parts of it, which they derive from the original hand of nature; which much exceed the share of capacity they possess on ordinary occasions; and in which they improve, little or nothing, by the longest practice and experience. These we denominate Instincts."[57] The usefulness of the natural instincts is recognized by Hume, when he emphasizes the contrast between instinct and reasoning; but he does so also explicitly in certain passages. Passions arise "from a simple original instinct in the human breast" and have been implanted by nature for "salutary purposes."[58]

Hume's analysis of the various passions leads him back to some factor which admits of no farther explanation, but which must simply be accepted as an ultimate factor is what he calls "instinct." It is that which gives the distinctive feature to the passions. This has just been illustrated in the case of the passions of pride and humility. But the same applies to the other passions. We will cite another instance, namely, self-love and benevolence, because the

[56] *Ibid.*
[57] *Enquiry*, Sec. IX.
[58] *Principles of Morals*, Sec. III, Pt. II.

point which Hume makes in this connection is one which McDougall stresses strongly. The latter considers "the constantly renewed attempt to reveal altruism as arising essentially out of a more or less subtle regard for one's own welfare or pleasure" to be "absurd" and "a gross libel on human nature."[59] Hume is concerned to maintain that benevolence—a term covering a large class of altruistic passions or sentiments (in Hume's sense)—is not developed from self-love. but from instincts which are just as primary as those from which egoistic sentiments are developed.

As regards self-love, he says, "Nature must, by the internal frame and constitution of the mind, give an original propensity to fame, ere we can reap any pleasure from that acquisition, or pursue it from motives of self-love, and a desire of happiness. . . . In all these cases, there is a passion, which points immediately to the object, and constitutes it our good or happiness; as there are other secondary passions, which afterwards arise, and pursue it as a part of our happiness, when once it is constituted such by our original affections. Were there no appetite of any kind antecedent to self-love, that propensity could scarcely ever exert itself."[60] Self-love, that is, is a complex growth that can take place only if some "instinct" is first present. Hume proceeds: "Now where is the difficulty in conceiving, that this may likewise be the case with benevolence and friendship, and that, from the original frame of our temper, we may feel a desire of another's happiness or good? . . . The social virtues of humanity and benevolence exert their influence immediately, by a direct tendency or instinct, which chiefly keeps in view the simple object, moving the affections, and comprehends not any scheme or system, nor the consequences resulting from the concurrence, imitation, or example of others. A parent flies to the relief of his child;

[59] *Social Psychology*, pp. 70, 71, 190.
[60] *Principles of Morals*, App. II.

transported by that natural sympathy, which actuates him, and which affords no leisure to reflect on the sentiments or conduct of the rest of mankind in like circumstances."[61]

The recognition of this instinctive basis of human conduct leads to a definite doctrine of pleasure. McDougall objects strongly to Hedonism—"the doctrine that the motives of all human activity are the desire of pleasure and the aversion to pain."[62] Hume, though by no means always clear and consistent, is not to be identified with such a doctrine. The primary fact for Hume is the direction of activity towards some *object*. "There are bodily wants and appetites, acknowledged by every one, which necessarily precede all sensual enjoyment, and carry us directly to seek possession of the object. Thus, hunger and thirst have eating and drinking for their end; and from the gratification of these primary appetites arises a pleasure, which may become the object of another species of desire or inclination, that is secondary and interested."[63] Hume generalizes this and applies it to the "passions." "Nature must, by the internal frame and constitution of the mind, give an original propensity to fame, ere we can reap any pleasure from that acquisition, or pursue it from motives of self-love, and a desire of happiness."[64] Pleasure accompanies the attainment of the object of the passion; and, after it has been experienced, it may become the object of desire and be deliberately sought in a secondary sense. But obviously it can be sought only through the operation of the natural instincts, if these are the basis of conduct and are such as even reason cannot check. Pleasure, therefore, if it is consciously sought, must be in "conformity with the mind" or with the "natural affections." In fact, pleasure in a primary sense can arise only under these condi-

[61] *Ibid.*, App. II and III.
[62] *Social Psychology*, p. 8.
[63] *Principles of Morals*, App. II. *Cf.* McDougall, *Social Psychology*, pp. 365ff.
[64] *Ibid.*

tions. "Some objects produce immediately an agreeable sensation, by the original structure of our organs, and are thence denominated Good; as others, from their immediate disagreeable sensation, acquire the appellation of Evil. Some objects again, by being naturally conformable or contrary to passion, excite an agreeable or painful sensation; and are thence called Good or Evil."[65] It is this, accepted by Hume as a fact, which lies at the basis of the virtues and of moral approbation and censure according to him, and which leads him to maintain the principle of Utility—the principle that the end which the virtues tend to "promote must be some way agreeable to us, and must take hold of some natural affection."[66] In this way, Hume, like the more recent theory, links up moral values with the instincts.

It is not the purpose of this article to argue that Hume develops a theory exactly similar to that of more recent times. Only a few of the main general features of Hume's doctrine have been mentioned in order to show how closely in its ideas and method of treatment it touches the more recent theory, and that all philosophy and psychology preceding the formulation of McDougall's theory is not subject to the criticism which the latter passes upon it. It is not possible to develop farther here the significance of various ideas which appear in his analysis of the passions—such as the distinction between "direct" and "indirect" passions, or between "simple" and "mixed" or "complicated" passions, or between passions that are, like pride and humility, not attended with desire and are "pure emotions" and passions that are attended with desire. "Impressions and passions are susceptible of an entire union; and like colors, may be blended so perfectly together, that each of them may lose itself, and contribute only to vary that

[65] *Dissertation on the Passions*, Sec. I, 1.
[66] *Principles of Morals*, Sec. V, Pt. I.

uniform impression, which arises from the whole."[67] This property of the passions gives rise to "some of the most curious phenomena of the human mind."[68] In working out this idea, Hume finds that some passions are connected with others, such as benevolence with love, and anger with hatred, by "a natural and original quality" or in an "original and primary" manner.[69]

That Hume groups the passions in a way different from more recent theories is not a serious matter, especially in view of contemporary differences on the same problem. Contemporary theory is more elaborate in its treatment of the instinctive factor than Hume. It disengages the "instinct" from desire and "sentiment"; and seeks to give precise meaning to the various terms, instinct, emotion, desire, sentiment. Hume's terminology is in this connection very confusing; it must be confessed that it is difficult to grasp any precise meaning and distinction of meaning in the terms, emotion, passion, affection, desire, sentiment. He speaks, for instance, of an "emotion" attending a passion.[70] But ambiguity of terminology could be found also in contemporary theory. In recent times attempts have been made to connect instinct with physiological factors. But it may be questioned whether all such theorizing has thrown much light upon the Instincts or has carried one much farther than Hume's vague and undefined "human frame" or "constitution." Much of what is new in modern times consists of "hypotheses"; and Hume is sceptical of hypotheses. He insists upon "fact and observation."[71]

Finally attention may be drawn to Hume's comprehension of the problem which has recently been felt to arise from the theory of Instinct and to call for solution. "All

[67] *Treatise*, Bk. II, Pt. II, Sec. VI.
[68] *Ibid.*
[69] *Ibid.*, Sec. IX.
[70] *Dissertation on the Passions*, Sec. VI, 1.
[71] *Principles of Morals*, Sec. I. *Cf. Treatise*, Bk. I, Pt. II, Sec. V, where however, he also touches upon a physiological theory of animal spirits, traces, and cells.

this is the effect of the natural and inherent principles and passions of human nature; and as these passions and principles are inalterable, it may be thought, that our conduct, which depends on them, must be so too, and that 'twould be in vain either for moralists or politicians, to tamper with us, or attempt to change the usual course of our actions, with a view to public interest. . . . All they can pretend to, is, to give a new direction to those natural passions, and teach us that we can better satisfy our appetites in an oblique and artificial manner, than by their headlong and impetuous motion."[72]

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[72] *Treatise of Human Nature*, Bk. III, Pt. II, Sec. V.

PSYCHOLOGY AS AN AMERICAN SCIENCE

UNLIKE Germany and Europe in general, the cultural expansion of the United States seems to have begun "from below" rather than "from above." The practical, the concrete, expressing itself in the erection of subways, skyscrapers and in wonderful inventions established itself here without the aid of traditions.

A glance at the table of Nobel Prize awards would confirm the view that American achievements have been in the sphere of the practical and utilitarian rather than the theoretical and artistic. There have been awards for physics, chemistry, medicine and peace endeavors but none for literature. Nor does it seem likely that the Nobel laureate in literature will be found in the United States for another decade or so.

And yet there is one department of cultural science which proved to be an exception to the general situation, and that is psychology, which, taken as a whole, at once evinced its ability to stand on its own feet without needing the support of Europe; and contributing to the general fund of the discipline fully as much as it was obliged to take from it.

If psychology is a theoretical science, we should hardly have expected it to show anything more than ordinary growth in the United States. It would therefore surprise many a reader to learn that this country enjoys the world leadership in psychology—not in all its branches, to be

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sure, but certainly in its most important fields. Perhaps this hegemony is due to the fact that psychology is at least in part a very practical science, which would naturally explain the exalted place applied psychology holds in the United States. But one of the founders of psychology, William James, we must remember, flourished at a time when the practical aspect of his science was not yet in evidence. It was reserved for his successor Münsterberg, whom James had invited to Harvard while still in his twenties, to lend impetus to the new movement.

By another stroke of luck, which is only a synonym for a favorable piece of chance, Titchener was about the same time called from Oxford to Cornell, where he has now brought up a generation of experimental psychologists. The German traditions of Münsterberg and the Anglo-German training of Titchener were almost indispensable for the moulding of American psychology. In those days the German influence was quite marked. Nearly every important psychologist of that time had studied in Germany, in most cases sitting at the feet of the pontifical Wilhelm Wundt at Leipzig.

Rather than deprecate this foreign strain we should attribute to it the catholicity of American psychology as compared, let us say, with the insularity of British or the self-sufficiency of French psychology. If American text-books in psychology follow the German *Lehrbücher* in manner, we must not forget that the matter is of a native brand. In some respects the pupil has outgrown its preceptor. Applied psychology, though born in Germany, has made its most rapid strides in this country where it has been of great service during the World War and since.

The intelligence tests movement, again, which was inaugurated in France also found its best expression in the United States. It is here that the original Binet-Simon scale was revised, standardized, applied on a gigantic scale,

and theoretically discussed. The word "test" has now become an international term for which there is no satisfactory technical substitute. Certainly a change has come about in the annals of education, when instead of borrowing words from our more established cousins, we become their purveyors of scientific terms. No more are we obliged to resort to a German jawbreaker for the purpose of making clear distinctions. We are quite at home with our "I. Q.'s," "weighting," "pooling," and "skewness." It would not be an exaggeration to say that the literature on mental measurement as well as the number and variety of tests produced in America would more than equal the output along similar lines of all countries combined.

Experimental psychology in the United States does not hold such an enviable position, for although in matter of quantity, we may well compare with the Germans, one feels that the work of the latter is more solid, more comprehensive, and more detailed than our own, though not always so critical. The German investigator does seem more mature, but often he starts out with foregone conclusions which lead him to interpret his data in accordance with his theories. The scope of experimental psychology is so large that at least half a dozen publications in the United States are devoted to the presentation of such investigation as offer definite results. The series of monographs, composed mostly of doctoral dissertations, has now reached the thirty third volume, thus bespeaking the productivity of American laboratories.

The behavior of animals and lower organisms has been most carefully studied in the United States by men like Thorndike, Yerkes, Jennings, Parker, Loeb and Mast. Animal psychology prior to Thorndike rested largely on a number of anecdotes, uncontrolled experiments and random observations. It was through him and Yerkes that

a proper technique for the handling of such subjects was made possible.

There is, on the other hand, a decided ebb when we come to the field of abnormal psychology. Not only France with its celebrated Pinel, Esquirol, Liebault, Charcot, Bernheim and Janet, but even Germany, which had lagged behind in this branch, and Austria can easily claim an advantage to this day over our psychiatrists, psychopathologists, and abnormal psychologists. Morton Prince alone has made noteworthy contributions toward the problem of personality, hysteria, and allied topics. The others who have become professionally prominent either treat their subject altogether from a medical point of view or else embrace psychoanalysis as a panacea for all nervous and mental ailments.

Psychoanalysis, strange as it may seem to the layman and the wealthy ladies who pay hundreds of dollars for the privilege of recounting their experiences from alpha to omega, is looked upon with suspicion by the majority of psychologists not only here but also abroad. Not that Freud, Jung, Adler, Stekel *et alii* are regarded as charlatans, but because as Professor Seashore puts it in the most recently published text-book, ". . . Psychoanalysis is so complicated and so controversial, at the present time, that it cannot profitably be given a place in the elementary text-book" (*Introduction to Psychology,* p. 381).

Of course that would scarcely constitute an adequate reason for the aversion felt toward this new movement in academic circles. Surely it might reasonably be expected that psychologists would make every possible endeavor to gain insight into the hidden recesses of the mind—and that is what *prima facie* psychoanalysis would attempt to do. But we must bear in mind that in reality psychoanalysis, as formulated by Freud, stands for the doctrine that all human occurrences whether dreams, creative impulses, slips, or

even historical and social phenomena, not to mention nervous disorders, are due to the functioning of an unconscious wish, repressed in various degrees as a result of conventions, and center about the sex activity of man in some form or other, and largely in the period of early childhood.

The objections to such an all-embracing principle are many, and ignoring the inane opposition of the bigoted on the ground of religious and moral scruples, we find that psychoanalysis is indicted on the following counts:

(1) It overemphasizes a single factor, which while extremely important and apt to be overlooked by a number of cloistered university dwellers, cannot take the place of every instinct and emotion which play on the life of the individual.

(2) Psychoanalysis proceeds without regard for the body of accepted facts that psychology has succeeded in building up on the basis of experimental work, and subordinates the conscious, with which we are familiar, to the unconscious which, no matter how important it might be, is after all a matter of speculation, with the result that once your doctrine is constantly kept before you, your interpretation can be so manipulated, in view of the fact that sex affords such a rich symbolism, that every event will be subsumed under or will point in the direction of that principle, "All Roads Lead to Rome."

(3) The dissension on fundamental points in the psychoanalytic camp and the circumstance that almost each prominent disciple of Freud has formed a school for himself would tend to make it apparent that psychoanalysis is a sphere where, as in the days of ancient Israel under the rule of the Judges, "every man does what is right in his own eyes."

(4) The role and significance assigned to experiences of a sexual nature, especially those during infancy, seems

to be exaggerated; and many peculiarities and eccentricities can be explained in a much less circuitous manner.

(5) It has been questioned by Münsterberg and others, though without just cause, whether an unconscious or subconscious mind is not a contradiction in terms.

Add to these objections the further drawback that there is no possible demonstrable proof of any of the Freudian or Jungian mechanisms; and the skeptical attitude of the more outstanding American psychologists on this issue will be somewhat appreciated. To be sure, many cures have been effected by Freudian methods, but it must be pointed out, apart from the fact that the most solid ground of psychoanalytical teaching is to be found in the field of hysteria and other disorders, that fakirs, shamans, medicine men, miracle men, and faith healers of all sorts, at all times, and in all climes, have had considerable success with their patients. Such is the power of mind upon mind.

That Freud's suggestive theories should make a strong appeal to the social worker, the literary man and the nerve specialist need not surprise us; but we must remember after all that it is for psychologists to decide whether psychological doctrines are acceptable or not; and of course it will not be expected of them that they would allow their whole edifice to be demolished in order to make room for a structure which does not resemble their own.

It is only fair to say, however, that a number of the Freudian concepts such as "repression," "complex," "conflict," and "sublimation," are gradually being accepted into the orthodox circle, largely on the recommendation of practitioners who find the doctrines of Freud and his hostile associates almost indispensable as working hypotheses in the treatment of their patients. An indication of rapprochement may be seen in the symposium on the Freudian contribution to psychology, to which a whole session was de-

voted at the last meeting of the American Psychological Association.

Psychical research, while not strictly a department of psychology, is another piece of adjacent territory that the American psychologist is not willing to explore before he sees a good prospect ahead. This aloofness some sympathizers of psychical research will attribute to a professional timorousness; others will ascribe it to the want of a cosmic interest on the part of American psychologists. Neither charge, I believe, accounts for the situation which, to my mind, is merely the result of a practical training and a feeling that there has been too much fraud manifested in the past by so-called mediums and psychics to justify the expenditure of valuable time on dubious investigations. Then again, the exposure of operatives does not now attract the world's attention as it did fifteen or twenty years ago, when Eusapia Palladino was maneuvering in the psychical arena.

That psychoanalysis and psychical research should have a greater vogue in England than in the United States may strike the reader as surprising, but therein really lies a trait of difference between the two types of minds. The British mind is more mystical and not so practical as the American. To the former, anything is possible provided it is imaginable, or even conceivable.[1] The fanciful novels of H. G. Wells are really of a piece with the remarkable Scientific Romances of C. H. Hinton or the highly ingenious hypothesis of Whately Smith to explain the ***modus operandi*** of a discarnate world.

[1] Since writing the above, I was astonished to find in Kant's *Observations on the Sentiment of the Beautiful and Sublime* a passage discussing this very trait, "It has been remarked on a number of occasions," says the great German philosopher, "that the English, though indeed a wise people, may at the same time easily be inveigled, by the bold announcement of a wondrous but preposterous thing, as to lend credence at first, of which there are many instances. But a bold cast of mind, prepared by various experiences in which many remarkable things yet have proved true, easily breaks through the minor reservations by which a weak-minded and distrustful person would immediately be checked, in such way guarding himself temporarily aganst error, though through no merit of his own. Kant thus accredits British apparent credulity to a strength of mind, and not to an intelligence defect."

The fact that the British Society for Psychical Research has had among its officers and members some of the most distinguished scientists and thinkers in Great Britain has of course created a respectable, perhaps even an aristocratic atmosphere about the society, but that is to be taken rather as an effect than a cause of the comparative success which psychical research has been enjoying in England. On the other hand, it must be borne in mind that the British Society maintains a more reserved and circumspect attitude than its American sister society.

Reverting to our main subject, let us consider whether the Americans have made a specific contribution to psychology, something that marks them off from other nations in that sphere of endeavor. Some controversy may be aroused over this question and its answer, but if we lend credence to Watson's contention, then *behaviorism* is a distinctively American movement. (*Psychology from the Standpoint of a Behaviorist*. Preface.) This assertion probably needs to be qualified, for Comte, a century ago effected his *salto mortale* by jumping clear over psychology and into sociology. Both he and Cournot thought that the only psychology which would prove scientifically possible was "cerebral physiology" or what we should call today neurology.

Watson, however, is correct in his claim in that it was reserved for the American psychologists to lead a concerted protest against a psychology which was based entirely on introspection, and though only one solitary member of the American Psychological Association insists that he does not know what consciousness means and that there is no such thing as a mental image, there are scores of others who believe psychology to be the science of behavior rather than one dealing with mind (mentalism), at which attitude the European psychologists are rather puzzled and somewhat amused.

Closely bound up with this revolt is the denial of inborn complex tendencies as such (instincts) which are declared to be by these protestants merely a series of reflexes conditioned by various experiences. Behaviorists in general combat the notion that purpose plays any part in the functioning of an instinct, or that the instinctive behavior is directed against any particular object. The mechanism is for them the all and all of every phenomenon.

At variance with the behaviorists, though not in direct opposition to them, are the dynamic psychologists who count Freud among their number. The dynamic psychologist is concerned with the *motive* in just as high a degree as with the *mechanism.* In fact the realm of motives is to him even more important than the world of mechanism. Dynamic psychology differs from what is commonly called structural psychology in allowing for *inference in mental life,* while structuralism would have nothing to do with what is not in consciousness. If you cannot introspect on the alleged fact it is of no consequence and we have no right to suppose that it even exists, according to traditional psychology. The dynamic psychologist, however, attempts to deduce its existence from the subsequent effects. A neurotic may not be aware of any particular mental conflict at a certain time, but the symptoms point to a conflict and the eventual cure corroborates the diagnosis.

It is not my purpose here to enter into the respective merits of behaviorism, introspectionism, and dynamic psychology (especially as I have done so at considerable length in my *Behaviorism and Psychology*) but merely to bring the issue clearly before us. American psychology, because of its variegated antecedents, is like a coat of many colors which to the undiscriminating eye, appear to merge into one another, but which the trained observer will immediately discern as representing different hues with the materialistic and mechanistic red of Loeb, Max Meyer, Watson,

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and others at one end of the spectrum and the vitalistic and purposive violet of McDougall, Bergson, and Driesch at the other extreme.

Apparently the people of the more or less intelligent classes are not very much concerned over the theoretical differences in psychology, if we are to judge by the hold which this science has obtained in the public mind. Within the last year three popular magazines purporting to dispense psychology to their readers have been launched, while the number of so-called applied psychology clubs with their New Thought rituals have been increasing throughout this country and Canada. The fact that the word *psychology* has come to possess a market value for clever people is *per se* sufficient proof of its progress and practical appeal.

As to whether the United States will in time become the great psychological center to attract students from all parts of the world as did Germany and France before the war, is a question which at most can be answered only problematically. It is true that the works of our psychologists are becoming better known in Europe largely through translations. James's *Principles of Psychology* and *Briefer Course* as well as Titchener's *Textbook of Psychology,* have appeared in several European languages, some of J. Mark Baldwin's books and recently Warren's *Elements of Human Psychology* have been translated into French, while Münsterberg's *Psychology and Industrial Efficiency* appeared in Spanish. Woodworth's *Movement,* and Pillsbury's *Attention* were first published in French, and McDougall's *Psychology* was brought out in Yiddish and Italian, and other works of his are about to be translated into Japanese—for all that, it is doubtful whether the atmosphere of a Leipzig under Wundt or a Würzburg under Külpe could be duplicated here, or to turn to abnormal psychology and psychiatry, whether the aura of a Charcot in La Salpetriere, of a Janet in the College de France, or a

Freud in Vienna could surround our foremost American psychologists with the same glow. It is *applied psychology* which will draw students from abroad, if there is to be anything like an academic invasion here; not that our applied psychologists are superior to our theoretical psychologists but because we happen to have the organization and the wherewithals to conduct investigations and obtain data in the most ramified situations. In other words, there *is* an American atmosphere in applied psychology, which, as I have shown in my *Moral Issues Involved in Applied Psychology,* causes European psychologists at times to look askance at us and calls forth, in some quarters, the derogatory reference to the *"Amerikanistische Tendez"* in psychology.

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HISTORY OF PHILOSOPHY

AT THE present time there is much need of a good, up to date, bibliography of historical studies in philosophy. An annual publication of a complete and critical bibliography of such studies as have appeared during the year would render a real service to scholars in this field. But, let it be understood, it is with no pretension to anything even approximating a complete reporting of publications that the following few pages are written. The aim of this brief survey is merely to give some indication, necessarily incomplete, of the nature and extent of the contributions which British and American scholars are making toward our better understanding and appreciation of the philosophers of the past. Having this end in view, we deliberately and with a certain recognized arbitrariness confine our consideration to *some* of the books on the history of philosophy, written in English, that have appeared during the last ten years. In the whole of English philosophical literature, one finds very few *comprehensive* histories of philosophy—works of the *allgemeine Geschichte* variety—which may be either pointed to with pride or viewed with alarm. "English writers have as a rule been most reluctant to produce histories of philosophy. They appear to be overwhelmed by a sense of the enormous difficulty of the task and of the awful dignity of the muse who presides over this form of composition."[1] But *partial* histories, dealing with some aspect or period of the whole, are more numerous; and it will be well, perhaps, to notice first a few

[1] Mr. Alan Dorward, in *Mind*, N. S. 32 (1923), p. 501.

of the works of this order that have been published during the last decade.

1. *"Histories" of Philosophy*: Mention may be made first of two rather unpretentious works dealing with the philosophy of France. (1) Mr. J. A. Gunn has surveyed the movements of French thought since the middle of the nineteenth century in his *Modern French Philosophy: A Study of the Development Since Comte.*[2] Three main currents of thought are therein distinguished—the positivist, the neo-critical, and the spiritualistic—and traced through their divergent treatments of the problems of the age, under the none too definite captions of Science, Freedom, Progress, Ethics, and Religion. The method of historiography here employed, which subordinates the individual thinker to the treatment of general problems, is beset with difficulties—as M. Bergson recognized in his "foreword" to the volume; few have followed with any complete success the illustrious example of Windelband here. But Mr. Gunn's exposition—he disclaims any attempt at critical evaluation—affords in the main a lucid and instructive representation of French philosophy of the period since 1850. (2) Supplementing the preceding in several ways is a more recent volume by Mr. George Boas, discussing the first half of the century under the title, *French Philosophies of the Romantic Period.*[3] "The importance of a philosopher," writes the author (p. 307), "is not to be measured by the number of pages which he receives in a history of philosophy" [*sic!*] . . . but "is to be measured by the intimacy which he has with the civilization in which he works; by the effect he has upon that civilization or by the clearness with which he expresses that civilization's interests." Mr. Boas is concerned simply with "making the proper correlations" between the political and aesthetic developments in the age following the Revolution and its philosophies.

[2] New York, Dodd, Mead and Co., 1922.
[3] Baltimore, The Johns Hopkins Press, 1925.

Whatever one may think of the statement that "Plato, Aristotle. and Plotinus had relatively little contact with their times" (or of its implications as regards their "importance"), one may still admit that, judged by the author's standard, the French thinkers with whom he deals "take on a striking importance."

Fields hitherto little familiar to English and American students have been cultivated advantageously in two scholarly works next to be noted. In *A History of Mediaeval Jewish Philosophy,*[4] Mr. Isaac Husik has done an admirable pioneer work. By "Jewish philosophy" the author here designates not the entire philosophical activity of the Jews during the middle ages, but rather—excluding mysticism and Kabbala—their *rationalistic* philosophy, whose task was primarily the "reconciling of two apparently independent sources of truth": "The Bible and Talmud were the documents of revelation, Aristotle was the document of reason" (*Preface*). (Is it not, then, rather a consequence of definition than a statement of historical fact that "Jewish philosophy never passed beyond the scholastic stage. . . . There are Jews now and there are philosophers, but there are no Jewish philosophers and there is no Jewish philosophy" [p. 431]?) Through eighteen substantial chapters, whose content is systematically ordered and clearly presented, Mr. Husik traces "the rationalistic movement in mediaeval Jewry from its beginnings in the ninth and tenth centuries in Babylon among the Karaites and Rabbanites to its decline in Spain and south France in the fifteenth century" (p. 428). Only those scholars who have intelligent access to the Hebrew literature of the period can pass judgment upon the accuracy of the author's interpretations. But it may be said that the work should have a generous measure of success in its avowed aim of appealing both "to the scholar and the intelligent

[4] New York, Macmillan Co., 1916.

non-technical reader"; appealing to the former certainly by its copious citation of sources in the notes, well relegated to an appendix, and appealing to the latter by its simple directness of statement and logically ordered expositions.

Professor Surendranath Dasgupta has published the first volume of his *History of Indian Philosophy*,[5] which will be completed in two volumes. Because Sanskrit and Pali sources of Hindu thought are inaccessible to most English and American students, this work by a recognized Sanskrit scholar is of considerable interest and importance. In its plan the book differs strikingly from any history of western philosophy; the difference is—as the author explains—necessitated by the nature of the subject itself. For in the evolution of Hindu philosophy one finds not a succession of one system or type of philosophy upon another which it tends to replace, but rather a parallel development of a limited number of rival systems. "Instead of producing a succession of free-lance thinkers having their own systems to propound and establish," writes the author (p. 63), "India had brought forth schools of pupils who carried the traditionary views of particular systems from generation to generation, who explained and expounded them, and defended them against the attacks of rival schools." "The Hindus classify the systems of philosophy into two classes, namely, the *nastika* and the *astika*. The *nastika* . . . views are those which neither regard the Vedas as infallible nor try to establish their own validity on their authority. These are principally three in number, the Buddhist, Jaina and the Carvaka. The astika-mata or orthodox schools are six in number, Samkhya, Yoga, Vedanta, Mimamsa, Nyaya and Vaisesika, generally known as the six systems" (p. 68). Dasgupta asserts (p. 8) that "the earliest beginnings of most systems of Hindu thought can

[5] Cambridge, Cambridge University Press, 1922.

be traced to sometime between 600 B. C. to 100 or 200 B. C. As time went on the systems began to develop side by side. Most of them were taught from the time in which they were first conceived to about the seventeenth century A. D. in an unbroken chain of teachers and pupils." Each of the successive chapters in this first volume of the *History* deals with one of these systems in its evolution throughout the whole of this long period. Of the evolution in general, Dasgupta writes (p. 64): "A system in the sutras is weak and shapeless as a newborn babe, but if we take it along with its developments down to the beginning of the seventeenth century it appears as a fully developed man strong and harmonious in all its limbs. It is therefore not possible to write any history of successive philosophies of India, but it is necessary that each system should be studied and interpreted in all the growth it has acquired through the successive ages of history from its conflicts with the rival systems as one whole." No one but a Sanskrit scholar could possibly judge the accuracy with which these Indian systems are interpreted; but every reader can appreciate the remarkable lucidity of Professor Dasgupta's style, no less than the learning that has entered into the production of this work for which the need is unquestioned.

Mr. W. R. Sorley's one volume *History of English Philosophy*[6] was designed "to trace the history of philosophy in Great Britain from the time when it began to be written in the English language"—with Bacon's *Advancement of Learning* (1605)—"until the end of the Victorian era" (*Preface*). It is based upon the chapters earlier contributed by Mr. Sorley to the *Cambridge History of English Literature;* thus, in its conception at least, it really antedates Mr. James Seth's study of *English Philosophers and Schools of Philosophy*[7] with which it naturally invites com-

[6] *Ibid.*, 1920.

[7] London, J. M. Dent and Sons, Ltd., 1912. In the "Channels of English Literature" Series.

parison. Both authors seek to delineate the British national philosophy as its traits are exhibited in the succession of thinkers who have given it shape.[8] Neither of these works, however, seems essentially to modify traditional interpretations of the leading British philosophers, although Mr. Sorley has, in particular, well insisted upon keeping intact the *whole* outlook of the individual thinkers, as against the procedure which views them merely as examples of "empiricism," "realism," "materialism," or some other "ism." A special service rendered by this work—not, however, in a greater degree than by Mr. Seth's volume—is the attention it gives to the literary, as well as the doctrinal, significance of English philosophers. The estimate of Mr. Sorley's work expressed by a scholarly English reviewer seems, with its cautious restraint, eminently fair: "There is probably no other work from which the general student of good intelligence can learn so readily exactly what our philosophers have done to shape the general course of the stream of 'British thought' and to create its vehicle of expression."[9]

Mr. Seth commenting, in 1912, upon the "confluence of the two streams of English and American philosophy" prophesied that "in the future, the movement of philosophical thought in England and America will be a single movement."[10] And then, ten years later, came Mr. A. K. Rogers' interesting volume on *English and American Philosophy Since* 1800: *A Critical Survey.*[11] The nineteenth century —even though we are now well beyond it—continues to present grave difficulties to the historian of its philosophy; the more grave in proportion as he conceives the historian's task to involve a complete and orderly representation of

[8] T. M. Forsythe's *English Philosophy: A Study of Its Method and General Development* (1910), on account of its entirely different method, still furnishes a most valuable supplement to these works.

[9] Mr. A. E. Taylor, in *Mind,* N. S. 31 (1922), p. 208. *Cf.* Prof. Albee's review of the volume in *Philosophical Review,* 1922.

[10] *English Philosophers and Schools of Philosophy,* p. 358.

[11] New York, Macmillan Co., 1922.

the entire philosophical output of a period, or as he is beset with the conviction that history must be written as a chronologically continuous story without gaps. Mr. Rogers disclaims any primarily historical purpose in writing this book, and disarms some possible criticism through his insistence (in his *Preface*) that the "book as a whole is frankly propaganda, and designed to recommend one particular attitude as against conflicting attitudes." But if the book be propaganda, it is not obvious what special message it definitely proclaims. Although the author's primary interest was not in "the tracing of historical affiliations and historical causes," it is nevertheless likely that his success in his endeavor "as a historian to be accurate" in the expository portion of his task will remain one of the most permanent recommendations of the work. The volume is by far the most complete picture we yet have of the whole English-American philosophical family of the nineteenth century, comprising as it does not only all of the first rate, but most, perhaps, of the second and third rate minds as well.

A good bibliography covering publications of the sort here being considered would quite certainly include several significant titles besides those of the six works that have been singled out for mention above. The compiler of such a bibliography would certainly not be so far led astray by titles as to omit the expanded and thoroughly revised second edition of Mr. Ernest Barker's *Greek Political Theory: Plato and His Predecessors*.[12] Professor A. E. Taylor's appraisal of that work seven years ago as "by far the best work yet in existence on the social and political side of Plato's philosophy"[13] is likely to remain a fair one for several years to come. Nor, further, would one fail to take cognizance of the real service that Mr. E. A. Burt has done all students of the seventeenth and eighteenth centuries by

[12] London, Methuen and Co., 1918.
[13] See his review of this work in *Mind*, N. S. 28 (1919).

his work, *The Metaphysical Foundations of Modern Physical Science: A Historical and Critical Essay.*[14] Perhaps nowhere—certainly in no single English work—can one find so illuminating a discussion of the philosophical aspects of the achievements of Copernicus, Kepler, Galileo, Gilbert, Boyle, and Newton. The book is a distinct contribution to the history of philosophy. Finally, one would certainly not forget to include the posthumously published *Lectures on Modern Idealism,*[15] by Josiah Royce. For where can one find more of appreciative insight into the systems of Fichte, Schelling, and Hegel, or a more trustworthy and suggestive interpretation of that post-Kantian movement, than in those pages? Royce often modestly disavowed the role of historian of philosophy. Nevertheless, he not only drew constantly and largely upon the wisdom of the past, but he often enough repaid his indebtednesses by shedding much of the illumination of the interpreter upon it.

One of the most learned historians of Greek philosophy has recently proclaimed that, "No one will ever succeed in writing a history of philosophy."[16] Many of us share Mr. Burnet's opinion, even when the grounds of our conviction may be not quite identical with his. Of course, such an opinion purports more than the platitudinous observation that no one can ever reasonably hope to write *definitively* the history of any, or all, periods; that one's work may be improved upon by others who come after is not in itself to miss "success." Rather one who voices such an opinion has an eye not so much to the inevitable limitations of historians of any one age as to a special difficulty in the very nature of the task itself. But what, after all, *is* the task of a historian of philosophy? One more often meets with disclaimers of the title than with any thoughtful discussion of

[14] New York, Harcourt, Brace and Co., 1925.

[15] These ten lectures, originally delivered in 1906 at the Johns Hopkins University, were first published by the Yale University Press, New Haven, in 1919.

[16] John Burnet: *Greek Philosophy. Part I: Thales to Plato,* p. 1.

the task disavowed. This would not be the occasion to discuss the problem even if the present writer felt that he had any new light to shed upon it. But it does seem to him clear, and a matter of importance, that some of our prevailing discouragement and failure grows out of a confused understanding of the task. At least let us ask: Is not the history of *philosophy* an enterprize that may be—nay, ought to be—clearly distinguished, e. g., on the one hand from the history of philosophical *writings* and *writers* and on the other hand from the history of "thought," of "culture," of "civilization," or of something else—if such there be—even more vaguely inclusive? Of course, philosophy scarcely "exists" apart from writings and writers, nor out of relation to civilization! Yet why must the historian of it compete creditably with the "Absolute"—or be a failure? Why should we in the field of philosophical history in particular rebel against the limitations of an inevitable abstraction? Or again (having limited ourselves to philosophy), let us ask: Must we not clearly observe the distinction between the task, e. g., of purely descriptive and interpretative exposition and the quite different task of tracing causes and influences of philosophies? And need a history of philosophy, in order to "succeed," perform both of these tasks? Indeed, would not success often lie rather nearer by the doing of one of these tasks adequately and consistently and without whimsically passing from one to the other? But, after all, Professor Burnet's prophecy of an eternal shortcoming rests upon rather different reflections. He wisely observes that "philosophies, like works of art, are intensely personal things; and thence passes on to the more questionable proposition that it is *only* "in so far as the historian can reproduce the Platonic contact of souls that his work will have value." Perhaps the fact of the matter is that, to be a good historian of philosophy one must needs be so much of a philos-

opher that the ubiquitous problem of the one and the many is apt to lay rather too burdensome a hand upon him qua historian. At least it seems to the present writer that it is in the interpretation of the "many" individual philosophies, rather than in the exhibition of the "one" through the continuous unfolding of successive philosophies, that English and American scholarship has chiefly furthered the history of philosophy. And we may now turn to some works which will serve to illustrate this service.

2. *Studies of Individual Ancient Greek Thinkers*: The philosophical literature of the twentieth century displays marked evidences of an increased interest in Greek philosophy, and perhaps in Platonism in particular. Students of the history of Greek thought are vastly indebted to English scholars in this field, notably to Mr. John Burnet and Mr. A. E. Taylor. Such students appreciate especially the vast learning and substantial scholarship, no less than the freshness of vision, which these men have brought to bear upon the vexed questions centering around the interpretation of the Platonic *Dialogues;* even while many are not ready to accept the whole of their positive results. Perhaps, among others, the problem of the "historic" Socrates is destined to remain a perennial one; it is certainly not the less apt to do so long as philosophical students feel satisfied in the assurance that, however historians of any generation may "solve" it, the *thought* of Plato's *Dialogues* is a secured possession forever. Yet, as Mr. Burnet simply observes, "In a way, no doubt, it does not matter whether we owe a truth to Pythagoras or Socrates or Plato but *it is natural for us to desire to know our benefactors* and keep them in grateful remembrance."[17] And what historian, having any scruples of conscience about his "evidences," after encountering all that prodigious progeny of unscientific methods, the bewildering number of "real"

[17] *The Socratic Doctrine of the Soul*, p. 3. Italics my own.

Socrates'es, will not feel the force of Mr. Burnet's remark: "It would be better to say at once that we cannot know anything about Socrates, and that for us he must remain a mere *x*. Even so, however, the Platonic Socrates is actual enough."[18]

Of course, the revolutionizing labors of both Burnet and Taylor mostly antedate the period of the last ten years which is here being considered. But we should note in passing the continuation of their work. Particular attention should be called to the important address of Mr. Burnet on *The Socratic Doctrine of the Soul*[19] as well as to his recent edition of *Plato's Euthyphro, Apology of Socrates, and Crito,*[20] whose notes (like those of the earlier edition of the *Phaedo*) richly abound in suggestive information, accessible even to the reader of English with no Greek. And all teachers and students of philosophy who have marvelled at the excellence of Mr. A. E. Taylor's little volume on *Plato*[21] may now find, furnished by his latest study of *Platonism and Its Influence,*[22] a fresh illustration of how much a *master* of the subject can achieve with great brevity and simplicity. In this latest work the arrangement of the three chapters on the "Principles of Science," the "Rule of Life," and "Plato the Theologian" is reminiscent of the earlier volume; but this later study is occupied with the *tradition* and *influence* of Plato under these three heads. Assuredly the fulfillment of this little book is far beyond the author's modest claim (in his *Preface*), "not so much to supply information as to provoke the desire for it." The information supplied is very considerable; and the excel-

[18] *Greek Philosophy*, p. 128.

[19] The second annual "Henriette Hertz Lecture on a Master Mind," delivered Jan. 25, 1916, and published for the British Academy by the Oxford University Press.

[20] Oxford, Clarendon Press, 1924.

[21] London and New York, 1911. In the "Philosophies Ancient and Modern" series.

[22] Boston, Marshall Jones Co., 1924. In "Our Debt to Greece and Rome" series.

lently selected bibliography indicates where the best of further sources of information lie.

Students of Greek thought will find much value in three pleasingly written volumes by Mr. Paul Elmer More. *Platonism,*[23] the earliest of these, now stands as a sort of introduction to a series which will be complete in four volumes on *The Greek Tradition*: *From the Death of Socrates to the Council of Chalcedon,* of which the first two have so far appeared, viz., *The Religion of Plato*[24] and *Hellenistic Essays.*[25] Mr. More appears to accept in general—although it does not fall within the scope of his work to discuss the problems involved—the accuracy of Plato's picture of Socrates: "the biographical parts of the *Apology, Crito,* and *Phaedo* present a faithful picture of the man Socrates"; and he adds, "It is easier to believe in the power of Nature to create such a character than in the ability of an author to imagine it."[26] In his interpretation of Platonism, this scholar lays much emphasis on its "dualism"; not only —what is recognized by all—the dualism revealed within the soul especially through the moral consciousness, but a supposedly ultimate *metaphysical* dualism. It was this dualism, according to Mr. More, which the later Hellenistic philosophies sought to escape, and which early orthodox Christianity alone retained, thereby becoming the true inheritor of Plato's teaching. It is Mr. More's ambition in these volumes to interpret the thought tradition which received its initial impulse from Socrates, was developed by Plato, and—despite its perversion in Stoicism and neo-Platonism—entered into Christianity. Of this tradition, "Platonic and Christian at the center," he writes: "Without it, so far as I can see, we should have remained bar-

[23] Princeton University Press, 1917. An elaboration of five lectures first delivered at Princeton University on the Louis Clark Vanuxem Foundation.
[24] Princeton University Press, 1921. *Cf.* the appreciative review by A. E. Taylor in *Mind,* N. S. 31 (1922), p. 518.
[25] Princeton University Press, 1923. *Cf.* the review by H. N. Gardiner in the *Philosophical Review,* Vol. 33 (1924), pp. 612ff.
[26] *Platonism,* p. 3n.

barians; and, losing it, so far as I can see, we are in peril of sinking back into barbarism."[27] Mr. More's aim is not "so much to produce a work of history . . . as to write what a Greek Platonist would have called a *Protrepticus*, an invitation, that is, to the practice of philosophy."[28] These volumes do not, perhaps, evince the breadth and depth of historical background which distinguishes other work in this field; but they do contribute, I think, toward effecting that "contact of souls" which Mr. Burnet has said is a criterion of the value of an historian's achievement.

Plotinus[29] is a conspicuous instance of a great figure in the history of thought who has not hitherto received, in the English literature, the studious attention that is his due. By two volumes on *The Philosophy of Plotinus*[30] the scholarly Dean of St. Paul's—long recognized as a master among the mystics—has made a noteworthy contribution to historical studies. Dr. Inge confesses himself "to be a disciple and not merely a student and critic of the philosopher" whom for many years he has studied "as a spiritual director, a prophet and not only a thinker." But his most enlightening exposition of Plotinian mysticism is not rendered the less accurate or impartial, it would appear, by Dr. Inge's deeply-felt conviction that Plotinus is "full of intellectual light and guidance" and that we may today well "find in him a message of calm and confidence for the troublous time through which we are passing." Four lectures on "The Third Century" and "The Forerunners of Plotinus" constitute a well done introduction to the detailed exposition of the system, which is the main achievement of the work. The present writer would not venture his own

[27] *The Religion of Plato*, Preface, p. viii.

[28] This statement in the "Preface" to *Platonism* seems to be equally applicable to the subsequent volumes.

[29] *The Complete Works of Plotinus* have recently been translated into English by K. S. Guthrie (Alpine, N. J., Comparatve Literature Press, 1918). See also the translation of the first four *Enneads* by Stephen MacKenna (London, P. L. Warner, 1917).

[30] London, Longmans, Green and Co., 1918.

judgment as to the accuracy, in several details, of this interpretation of the *Enneads*.[31] But he must confess that the later lectures, dealing with the practical aspects of the philosophy—rather than those dealing with the metaphysics—have seemed to bring him much light in a field that has always seemed one of the most inhospitable toward his efforts at understanding.

As an acquaintance with the Greek language becomes less and less a part of the equipment of large numbers of philosophical students, the greater is the significance attaching to such notable enterprizes of translation as that sponsored by the University of Oxford in the case of Aristotle's complete works. One of the first volumes of this translation to appear was the translation of the *Metaphysics* by Mr. W. D. Ross, one of the co-editors of the work. More recently, we have the substantial volume by Mr. Ross entitled *Aristotle*,[32] a work of mature scholarship. Its aim is neither to trace Aristotle's ideas to their earlier origins, nor to follow out their influence, but (as stated in the *Preface*) "simply to give an account of the main features of his philosophy as it stands before us in his works." The content of the Aristotelian treatises is, in the main, lucidly summarized in chapters dealing in order with the Logic, Philosophy of Nature, Biology, Psychology, Metaphysics, Ethics, Politics, and Rhetoric and Poetics. How far such a method of exposition, which tries to lift its subject out of the stream of ideas in which his thought lived, is the way to the best understanding of a thinker, we shall not discuss. But the present writer misses in this book the exhibition, which he fondly hoped to find there, of a deep conviction—such as he knows Mr. Ross must feel—of the vitality and interest for our own day of some of Aristotle's problems and solutions. This is not to suggest—what I am far from believ-

[31] One may see for competent criticism the review by A. E. Taylor in *Mind*, N. S. 28 (1919), pp. 238-245.

[32] London, Methuen and Co., Ltd., 1923.

ing—that the study of the great minds of the past need be justified by the light they may shed upon present-day problems. But as little does it appear to me that a great philosophical system of the past need be distorted by being examined in the light of present day interests. It must be difficult, I should suppose, to write chapters on, e. g., Aristotle's biology or psychology with no references to the issues in contemporary philosophy of "mechanism and vitalism," "emergent" and "creative" evolution, "functionalism," "behaviorism," etc. But doubtless there are those to whom the seeming detachment of Mr. Ross's writing from present day concerns will seem the surest evidence of that objectivity which is always to be expected in the true historian. Certainly everyone will profit by the enormous learning that has gone to the preparation of this compact volume.[33]

3. *Studies of Modern European Philosophers*: Neither English nor American writers have, during the last ten years, enriched our understanding of the philosophers of the seventeenth century through any works comparable, e. g., with those earlier ones of N. K. Smith on Descartes, of Sir Frederic Pollock and Joachim on Spinoza, or of Russell on Leibniz.[34] But they have advanced considerably our knowledge of some British philosophers. This is conspicuously true in the case of three meritorious volumes, next to be mentioned, dealing severally with the three classic representatives of "English Empiricism." Each of these vol-

[33] Mr. A. E. Taylor's *Aristotle* (2nd ed., London and Edinburgh, 1919. In the series of "The People's Books,") is a small volume only in respect of the number of its pages, and loses not at all by comparison with the much more detailed exposition by Ross.

[34] This is not failing in appreciation of the book by Mr. Leon Roth on *Descartes, Spinoza and Maimonides* (Oxford, Clarendon Press, 1924), with its fresh discussion of the old problem of the relation of Spinza's thought to its Cartesian and Jewish antecedents; or of his recent editing of the *Correspondence of Descartes and Constantyn Huygens*, 1635-1647 (Oxford, Clarendon Press, 1926). Nor do we overlook, e. g., the monograph by Mr. A. G. A. Balz on *Idea and Essence in the Philosophies of Hobbes and Spinoza* (New York, Columbia University Press, 1918) and other brief studies too numerous even to be listed here.

umes strives to correct prevailing misconceptions about the motivations of these thinkers; and all protest against the one-sidedness of view which results when these philosophers are looked upon merely as exponents of "empiricism."

The far reaching influence of Locke's *Essay Concerning Human Understanding* upon subsequent philosophical history is universally recognized. But it may well be doubted whether this important document has ever received so fair or so masterly an interpretation as in Mr. James Gibson's *Locke's Theory of Knowledge and Its Historical Relations.*[85] Mr. Gibson correctly observes (in his *Preface*) that the habit of regarding the movement in British philosophy which culminated in Hume "as the story of the self-refutation of certain of Locke's principles, has been largely responsible for the false perspective in which the *Essay* itself is too commonly viewed"; and he notes further (p. 182) that the fact that the *Essay* "constitutes the starting-point of the classical development of philosophy in England has led to concentration of attention upon its influence, to the comparative neglect of the sources from which it is derived." These limitations and defects in interpretation Mr. Gibson seeks to remedy. In "Part I" he sets forth "The Doctrine of the Essay" with a rare freedom from prepossessions about it. Insisting that the real motive of the work is epistemological, he observes (p. 1f.) that "any account of Locke's work which finds its main significance in an account of the genesis of our ideas fails entirely to represent either the aim or the outcome of the *Essay,* as these were conceived by its author. Great as was the importance which he attached to his theory upon this subject, it played only a subordinate part in the scheme of the *Essay* as he designed it; and any attempt to make it central alters entirely the perspective of the whole." How important it

[85] Cambridge, Cambridge University Press, 1917.

is for the interpreter of Locke to keep this point *always* in view becomes sufficiently clear in the excellent discussion of Locke's polemic against innate principles, the real point of which has often been missed. "Part II" discusses "The Historical Relations of Locke's Doctrine" most instructively. Especially helpful is the chapter treating of Locke's relations to his contemporaries—particularly his scientific contemporaries—in England. Professor Sorley in his *History* asserted (p. 104) that "John Locke may be regarded as, on the whole, the most important figure in English philosophy." Mr. Gibson, who cautiously refrains from evaluations of that sort and adheres strictly to his task of *understanding* Locke, has gone far in exhibiting the proofs for Mr. Sorley's statement.

Second among the books on British philosophy we may mention Mr. G. A. Johnston's *The Development of Berkeley's Philosophy*.[36] The author is not sparing of superlative estimates of his thinker: "Berkeley is naturally the keenest mind in the history of English philosophy" (p. 325), "perhaps the freshest and most original thinker in the history of British philosophy" (p. 12), and "Berkeley's literary style is the most delightful in the history of English philosophy" (p. 382). But despite such unrestraint, Mr. Johnston's work is on the whole a cautious and critical investigation of the evolution of Berkeley's theories. Especially good is the full and painstaking discussion in the chapter on the "Origins of Berkeley's Thought." As every interpreter must nowadays do, Mr. Johnston devotes much attention to the *Commonplace Book*, and gives a detailed and convincing discussion of the original order of its entries —with regard to which he differs significantly from the view of Campbell Fraser. While the author recognizes that Berkeley's "philosophical activity was not only influenced by the deist controversy, but was dominated by it,"

[36] London, Macmillan and Co., 1923.

he yet does not fall into the common error of supposing Berkeley's discovery of his central principle—*esse est aut percipere aut percipi*—to have been motivated by religious considerations, however much Berkeley welcomed what he later thought to be the agreement between his principle and religious orthodoxy. (It is not a little interesting to note that, instead of viewing the frequent avowals of orthodoxy in Berkeley's pages as exhibitions of the misplaced piety of an "Angelic" doctor, Johnston sees rather in them another instance of the practical sense of Berkeley whose eye was usually upon the "main chance" for ecclesiastical preferment! *Cf.* Chapter VII on Berkeley's "Philosophy of Religion.") Among many suggestive points, scattered throughout the book, is a fine discussion (p. 209ff.) of the way in which Berkeley's interest in the mathematician's employment of signs suggested his own metaphysical conception of signs. Two appendices to the volume discuss helpfully (1) the old question of Berkeley's relation to Collier, and (2) the philosophy of John Sergeant, who, strangely neglected by historians, it would appear "merits study by all who are interested in the philosophy of Locke and Berkeley" (p. 396).

In the third volume on British thinkers referred to above, *Studies in the Philosophy of David Hume*,[37] Mr. C. W. Hendel has made an extremely interesting contribution to our knowledge about one of the greatest figures in the history of modern philosophy. One could point to few, if indeed to any, studies of Hume in English literature which rival this in thoroughness and objectivity. Mr. Hendel corrects several current shallownesses of interpretation. E. g., Hume's critics have too often supposed that his declaration that observation of the mind reveals only a "mere bundle or collection of perceptions" amounts to a denial of personal identity. This, however, is to neglect Hume's no

[37] Princeton, Princeton University Press, 1923. *Cf.* the recent review by Mr. S. P. Lamprecht in the *Journal of Philosophy*, Vol. 22 (1926), pp. 411-418.

less significant words to the effect that "the true idea of the human mind is to consider it as a system of different perceptions or existences. . . . In this respect, I cannot compare the soul more properly to anything than to a republic; . . . the same republic in the incessant changes of its parts." In his chapter on "The Self or Personal Identity," Mr. Hendel shows a very just understanding of Hume. Other examples there are a plenty in the book. But one of its most striking and novel features is its concern with the theological motivation and implications of Hume's thought. In 1915 Mr. Hendel undertook—for a doctor's dissertation—a study of Hume "in order to arrive at a clearer understanding of Hume's position with regard to religion." To Hume has commonly been attributed a hostility toward religion and but a mild personal concern, at most, as to the *truth* of religious beliefs. Mr. Hendel urges quite convincingly that Hume's interest in "human nature" —especially his epistemological enquiries—was the direct outgrowth of an interest, reaching back to his early youth, in the theological problems of the day. He supposes also that the final outcome of Hume's lifelong reflections on religion was, in effect, to substitute a newer for an older standpoint of "naturalism" in religion—finding the basis which validates the belief in God's existence not in the evidences of external nature but rather in the "natural imagination" of man. It does not fall within the scope of Mr. Hendel's book to treat, save quite incidentally, of the ethical writings of Hume.

Recent years have witnessed the publication of two very notable volumes on the philosophy of Kant: *A Commentary to Kant's "Critique of Pure Reason"*[38] by Mr. Norman Kemp Smith, and *A Study of Kant*[39] by the late Mr. James

[38] London, Macmillan and Co., 1918; second ed., 1923. *Cf.* the excellent reviews by R. F. A. Hoernle in *Philosophical Review*, Vol. 28 (1919), pp. 305-313, and G. Dawes Hicks in *Mind*, N. S. 28 (1919), pp. 217-229.

[39] Cambridge, Cambridge University Press, 1922. *Cf.* the same author's *Immanuel Kant*, being the "Hertz Philosophical Lecture" for the same year.

Ward. Were we bold—or foolish—enough to attempt an arrangement of the works mentioned in this survey according to the order of their merit and distinction, certainly we should have to place these two works very near indeed to the head of our list. Mr. Smith's impressive scholarship and powers of interpretation in this *Commentary* defy any brief reporting of his achievement. The work is now known to all Kant students as skillfully combining the functions of commenting with insight, and in order, upon the detailed passages of the *Critique* and of supplying a masterly constructive interpretation of the whole work. The interpretations of Kant by English scholars have often suffered from their Hegelian bias; one of the traits of Smith's work, which was promptly upon its appearance recognized with approval, was that he did not look upon Kant's role in history as that of a John the Baptist to Hegel. The incompatible tendencies in the *Critique* are not glossed over, but receive close critical examination. In this matter the author has thoroughly availed himself of the more recently known facts about the origin and history of Kant's text—acknowledging his great indebtedness to Adickes and Vaihinger in particular. The merits of such textual analysis appear to the best advantage, naturally, in the illuminating discussion of the various "deductions" of the Kantian categories. One excellent feature of the volume is its critical examination of Kant's relations to earlier thinkers. The second edition has added an Appendix on the bearing of Kant's *Opus postumum* upon the doctrine of the *Critique*.

In Ward's *Study of Kant*, the aim is to exhibit the informing and central insights of the Kantian philosophy viewed as a whole. Kant's doctrine is held to be essentially —and to its credit—"anthropomorphic," by which is meant that it is a deliberate attempt to interpret the World in terms of the Self as this latter is known in reflection. That Dr. Ward should find Kant's essential achievement to lie

in the direction of a further development of Leibniz' doctrine, should not be surprising to those acquainted with Dr. Ward's own *Weltanschauung*. Nearly the first fifth of the *Study* is devoted to a quite unusual tracing of Kant's intellectual development. In the later pages attention, well proportioned to its great merits, is given to the *Critique of Judgment*. It is high, but I think well deserved, praise that is given this work by a competent reviewer: "The proper comparison is with Caird's treatise, and despite the startling disparity of size. . . . Ward's discussion is, we may fairly affirm, no whit inferior in philosophical importance."[40]

Among recent books dealing with philosophers of the nineteenth century[41] possibly the most noteworthy is Mr. W. M. Salter's *Nietzsche the Thinker*.[42] "Criticism of Nietzsche is rife, understanding rare. . . . Few appear to have thought it worth while to *study* Nietzsche," the author writes in his *Preface*. That Mr. Salter has studied his subject, the present volume leaves no room to doubt. The Nietzsche of the successive "periods" is clearly and fully presented with abundance of well chosen quotations; and, throughout the interpretation is conspicuous for its sobriety and restraint—some might say, even to its detriment. Not often has Nietzsche been treated to so large a dose of the apparatus of scholarship; but the handling has certainly produced the most adequate exposition of its subject in the English language.

This review must mention in conclusion two collections of historical studies: (1) Under the editorship of the De-

[40] Mr. R. F. A. Hoernle in the *Philosophical Review*, Vol. 33 (1924), p. 290. *Cf.* the review of Ward's *Study* by N. K. Smith in *Mind*, N. S. 32 (1923), p. 479.

[41] In a complete survey, note would be taken certainly of many other works, such as, e. g., H. A. Reyburn's *The Ethical Theory of Hegel* (Oxford, Clarendon Press, 1921) and W. T. Stace's *The Philosophy of Hegel* (London, Macmillan and Co., 1924).

[42] New York, Henry Holt and Co., 1917. *Cf.* the review by Miss Grace Neal Dolson in the *International Journal of Ethics*, Vol. 28, p. 554.

partment of Philosophy of Columbia University have appeared two volumes of the *Studies in the History of Ideas.*[43] The essays are varied in theme and quite unequal in merit. To the earlier volume, Professor Woodbridge contributed an excellent discussion of "Berkeley's Realism," and Professor Dewey, an interpretation of "The Motivation of Hobbes' Political Philosophy." To the later volume, Mr. S. P. Lamprecht contributes a study on "Empiricism and Epistemology in David Hume," and Mr. A. G. A. Balz on "Dualism in Cartesian Psychology and Epistemology" —both well documented and worth while studies. The second volume has also an interesting "Supplementary Essay" by Mr. Dewey on "The Development of American Pragmatism." (2) E. A. Singer: *Modern Thinkers and Present Problems*[44] consists of a series of studies of great persistent problems as they have been wrestled with by the classic thinkers: Bruno, Spinoza, Hume, Kant, Schopenhauer, and Nietzsche. The essays, historical in spirit, may, the author tells us, "stand for moments of any thoughtful life and will have done all they were intended to do if they inform such a life with, and give it a sense of, attachment to the world that has gone before it and is going on 'round." These essays should do more than this; they *will* charm the reader, through their incomparably exquisite style—almost to forgetfulness of the difficulty of the problems and to overlooking the great subtlety of the writer's handling of them.

SEYMOUR GUY MARTIN.

EVANSTON, ILL.

[43] New York, Columbia University Press, Vol. I, 1918; Vol. II, 1925.
[44] New York, Henry Holt and Co., 1923.

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